TRANSMITTAL SLIP | DATE 26 May 1981

TO:

ROOM NO.	BUILDING

REMARKS:

Per our telephone conversation, attached is the magazine that should be filed in the 30 April 81 briefing file (SSCI mark up of the FY 82 Intelligence Authorization Bill, DDCI was the witness).

FROM: Judy

ROOM NO.	BUILDING	EXTENSION

FORM NO. 241 REPLACES FORM 36-8 WHICH MAY BE USED. (47)

1 FEB 55

[redacted] said Senator Goldwater suggested you read article on AEROFLOT at SSCI this morning.

STAT

[redacted]

ILLEGIB

TO

ARMED FORCES May 1981 $1.75

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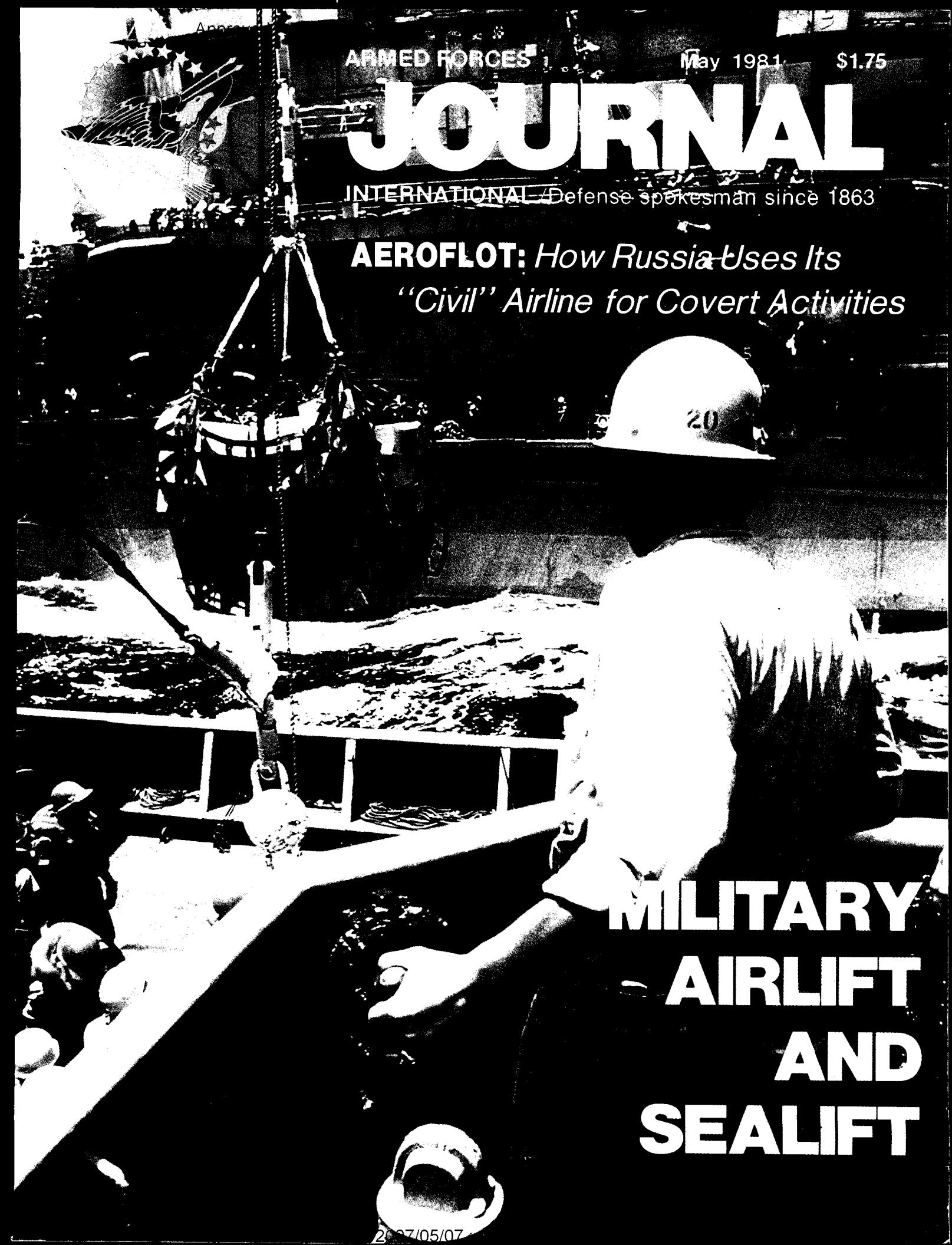
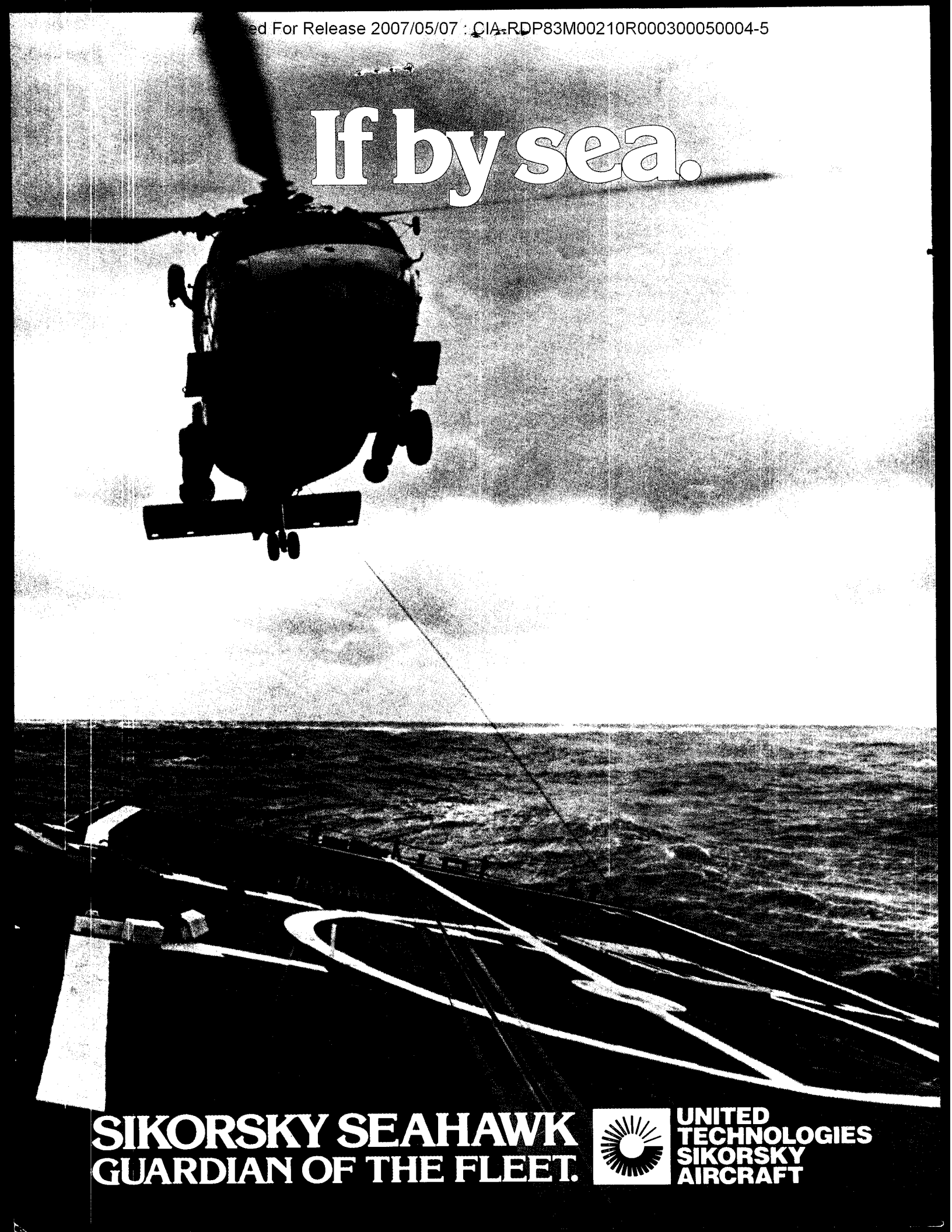
INTERNATIONAL / Defense spokesman since 1863

AEROFLOT: *How Russia Uses Its "Civil" Airline for Covert Activities*



MILITARY AIRLIFT AND SEALIFT



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SITUATION REPORTS

FEATURES

STANDING FEATURES

THIS MONTH'S COVER illustrates one of the most critical, controversial and timely facets of national security planning today: America's ability to "lift" its forces to trouble spots around the globe. In this issue, *AFJ* takes a detailed look at how ready the nation's airlift and sealift forces, both military and civilian, are to meet those needs. And, at what's on the horizon, including the Air Force's proposed new C-X airlifter.

Elsewhere, an unprecedented look at Russia's Aeroflot "civil" airline and its use in military contingencies, intelligence gathering, and revolutionary ferment.

As Memorial Day approaches and this issue comes off the press on the anniversary of last April's rescue mission to free our former hostages from Iran, at a time when we all remember the courage of the eight men who lost their lives at Desert One, *AFJ* looks back to the events surrounding that oft-maligned rescue mission—and the hardest decision Jimmy Carter ever had the courage to make. ■☆■

Defense Forum

Decision Supporter—or Decision Maker?

■ I have read with interest your competing articles on the AV-8B. I believe that Mr. Murray makes a mistake common to many in his profession—he has mistaken the role of the systems analyst with that of the manager. It is his job to provide information which supports decisions, not makes them.

There are many factors other than the quantified results of systems analysis that make up defense complexities of combat when he attempts to dismiss the subjective judgment of a commander as a misconception in the heat of battle. While he is correct that a tank killed 45 mintues late is still denied to the enemy for tomorrow's battle, so too are our ground troops killed by that same tank during that 45 minutes denied to us. Let's rely a little more on the judgment of a proven combat leader and not rush headlong after numerical justification of every decision.

John Turley
Bowie, MD

Better Alternatives to *AFJ*'s Strategic Initiatives

■ The article in your March issue by Mr. Schemmer, "Strategic Initiatives to Bridge a Budget Chasm Too Big for Dollars Alone to Cure," was an interesting and certainly creative attempt to solve many paradoxes inherent in our present defense posture. I believe, however, that many of his solutions fail to adequately address military and political realities.

The proposal to withdraw the United States Army's 2nd Infantry Division and the 3rd Marine Division from the Western Pacific, and to replace them with a Japanese Corps ignores several diplomatic problems. Many Koreans still have unpleasant memories of occupation by Japanese troops, and are concerned over the possible emergence of a militaristic Japan. Further, Japanese public opinion itself is a fragile thing which has to be prodded slowly to the right through the process of consensus.

When Mr. Schemmer discusses the "United States Marine Corps/Norway Mismatch," he also ignores a major fallacy in his hypothesis by assuming that Marines are unsuited to fight in that area of the world. Not only are all three Marine divisions training their battalions for winter warfare on a regular basis, but Marines presently participate in Norwegian exercises annually. Perhaps the most important argument for a continued Marine contingency role in the area is the need to maintain a forcible entry capability of amphibious assault to counter any Soviet thrust at Europe's northern flank. Throughout history, Marines have proven that they can not only fight anywhere in the world, but that they can win.

As he discusses his "Gulf Fuel Option," the author correctly highlights the problems of transporting enough refined fuel to conduct mechanized operations in that part of the world. His solution, relying on Kuwait or Saudi Arabia to provide refined petroleum products to United States forces committed to the area, ignores the tremendous instability in their presently conservative governments. This may appear to be a less expensive alternative than building a sufficient airlift capability, but could easily lead to no fuel at all if the political situation changes abruptly. An obvious alternative passed over by Mr. Schemmer is to utilize tankers prepositioned with NTPS shipping to augment airlift requirements.

Maj. C. M. Lohman, USMC
Dumfries, VA

USAF's Rapier Buy

■ Much has happened over the last three years; I am sure you are aware that the United States Air Force is in the process of acquiring Rapier for the defense of its NATO bases in the UK, whilst Rapier continues to defend our own Army and Air Force bases in Germany. You will not therefore be surprised that the system is being considered as a most suitable contender to provide low-level air defense for the newly constituted Rapid Deployment Force.

I am anxious not to arouse old and unnecessary controversy, but am equally concerned that the United States officers with the responsibility of planning the introduction of the RDF have accurate facts. Many of these officers read and sometimes contribute to the *Journal* and hence my concern and this letter to you.

If I may refer to the March issue of the *Journal*, on page 50 you say, "Carter and Brown have asked Congress to buy a non-NATO standard Rapier air defense system. . . ." I underline the words *non-NATO*, as this is not true: Rapier has for some years now formally been declared operational by SACEUR, the only weapon of its type to be so recognized. The Rapier system now being introduced to the United States Air Force is every bit as standard as that employed by the Royal Air Force and the British Army in the operational defense of their NATO bases in Germany.

You go on to say, "The Rapier buy is an important political program given England's decision last year to buy Trident submarine-launched ballistic missiles and the need to offset some of the cost through a two-way street US purchase of British hardware." The implication that must be drawn from this statement is that if it had not been for the Trident program in the UK, Rapier would not have been acquired by the US Air Force. This is simply not true. Rapier was selected by the USAF only after the most painstaking review of the whole problem of air defense for vital bases, and Rapier emerged as the only viable system that could be acquired with a substantiated performance, cost, and delivery profile. I understand that *after* the decisions were made some very minor arrangements on manpower offsets were agreed, but this had nothing to do with the selection of the right equipment to meet the operational requirement.

For the record, and as someone who has been involved in the disciplines of air defense over many years, may I make the following observations on the requirement for air defense for the Rapid Deployment Force:

- Air defense at high-, medium- and low-level altitudes is essential;
- By the nature of the logistical limitations imposed, the RDF will be unable to lift and deploy much of the existing air defense equipment, particularly the medium altitude air defense missile systems.

Examination will show that both high and medium altitude cover can only be achieved in this case with aircraft.

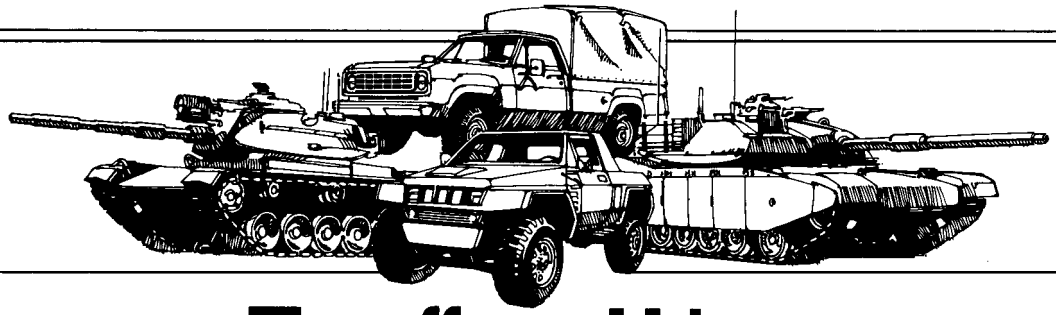
Further examination (as in the case of the USAF selection of Rapier) will show that Rapier is the only proven system of both capability and logistical profile suitable for the RDF which is available and can provide adequate low-level antiaircraft defense in an acceptable time-scale and cost.

Gordon Banner
British Aerospace
Hertfordshire, England

Bring Back the Battleship!

■ So far, the only objections I have heard to resurrecting the *Iowa*-class battleships are manpower and vulnerability. The former problem must be solved for the entire Navy. The latter "problem" does not exist.

Torpedoes, once the bane of battleships, are less of a problem now, as modern ASW is forcing submarines to adopt standoff weapons such as cruise missiles. Indeed, the new monster Russian submarine is reportedly designed for cruise missile attacks. But cruise missiles are slow and carry a relatively small payload. Large caliber naval shells travel exceedingly fast and carry a large payload. It was precisely to meet this latter threat that the *Iowa*-class was built with 19-inch thick steel



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belts. Clearly, vulnerability is not a problem for the *Iowas*.

Further, battleships can be loaded down with a large number of antiaircraft weaponry. It seems to me that they would add to the fleet's capability without adding to its vulnerability, as well as impressing the hell out of anyone who saw them.

Edward Hume
Washington, DC

20/20 Foresight for a Change?

■ R. James Woolsey's article, "US Navy Budget: Ingenuity, Audacity and a Tailhooker Spirit" (April *AFJ*,), challenges the Navy to face up to some "nasty questions" in planning the Reagan Administration's naval expansion. Mr. Woolsey advances some interesting and innovative concepts (the use of space, emphasis on EW, increased NBC warfare capabilities, distribution of offensive power across more platform types, V/STOL, innovation in the application of technology).

Subsequent to the preparation of his article, Mr. Woolsey had the opportunity to meet with me and review some of the current work of the Navy's Long-Range Planning Group (established in January, 1980). He found that the types of concepts he supports have been addressed by our group and many are receiving active consideration by the Navy leadership. As a case in point, a number of his proposed initiatives were published as long-range priorities in the planning and programming guidance issued by the Chief of Naval Operations earlier this year.

Needless to say, Mr. Woolsey was very supportive of the work of the Long-Range Planning Group and would, I believe, agree that we are not suffering from myopia, "as most naval planners are during salad years."

R.Adm. C. R. Larson, USN
Alexandria, VA

More On the Bloodiest Battle

■ Re: "The Battle Over the Bloodiest Battle," the battle of the Somme must rank at the top among the great tragedies of modern warfare.

John Keegan in his excellent book, *The Face of Battle*, determined that whereas the German losses on July 1, 1916 totaled 6,000 killed or wounded, the fourteen British divisions committed to the assault "had lost about 60,000, of whom 21,000 had been killed, most in the first hour of the attack, perhaps the first minutes." These figures do not include losses suffered by the French who committed 20 divisions to the battle.

These statistics are interesting, but pale when compared to the potential for killing in the hands of today's armies! Only a strong America can prevent the setting of new casualty scores.

Brig. Gen. Eugene Maier, USAR-Ret.
Bandera, TX

Setting the Record Straight, Again!

■ You reported in February that on December 19, at Frank Carlucci's request, I called Cap Weinberger about Bill Van Cleave. You stated that I believe in strategic disarmament. You suggested that I was under consideration for a position at DoD. All three statements are false.

I have never spoken or written to Secretary Weinberger about Bill Van Cleave; neither on December 19 nor on any other date. I have never spoken nor written in favor of strategic disarmament and do not believe in it. Finally, I made crystal clear to those involved in the transition that I was not interested in any position anywhere in government, a decision which remains firm.

To set the record straight, I left Wall Street and came to Washington to serve as special civilian assistant to Paul Nitze in 1966 when he was SecNav. Later I served as Deputy Legal Advisor at the Department of State and as legal advisor to the SALT I delegation. I believed then, and do now, that arms control in general and SALT in particular must be considered in the context of our national security policy, the essence of which is secure deterrence.

Finally, in my 15 years in Washington and 10 years in government, including service as Under Secretary of HUD, I have never seen an Under Secretary as effective as Frank Carlucci, whom I worked with daily when General Counsel of HEW. I believe Frank will prove to be the ablest DepSecDef seen at DoD in years.

John B. Rhinelander
Washington, DC

Editors' Note: *We hate to repeat ourselves, but as we noted in March's Defense Forum, on this one we goofed!*

Concerning the article referred to in Mr. Rhinelander's letter, "Top Level Infighting for Key Defense Posts," it was never the Journal*'s intent to endorse the allegations in a memo we quoted and referenced throughout the article, only to highlight the level of tactics sometimes employed in jockeying for high level appointive positions. We appreciate that Mr. Rhinelander set the record straight, and hope he'll accept our apologies.*

AFJ reserves the right to edit all Defense Forum letters for clarity and to conform with space constraints. ■☆■

If You Don't Subscribe— You Should!

Deficiencies in Air Worse Than on Ground?

■ *AFJ* is by far the best all-around professional reading magazine available for military officers, and I recommend it to all officer students and staff at the Marine Corps Education Center in Quantico.

Not to say that Mr. Woolsey's article "Who Will Shoulder The Burden" in the Feb. '81 issue was up to par, however. It is naive to believe that the "deficiencies of air are more quickly corrected" than for a division or for logistics, that it is easier to keep aviation ready. The lead times for procurement of aircraft and parts and the lead times for training/integrating aircrews/maintenance crews far exceeds any similar problems that I am aware of on the ground side.

Perhaps Mr. Woolsey could expand his point if I have missed it.

Col. M.W. Allinder, Jr.
Quantico, VA

Stick By Your Guns!

■ Regarding the March, 1981 edition of *AFJ*, specifically the Defense Forum letter "On Character Assassination:"

Stick by your guns! The likes of Anderson and Turner deserve it. It is they who do not have the wisdom to extensively correct the record—if indeed the record need be corrected.

I continue to enjoy the outstanding work you and your staff are doing.

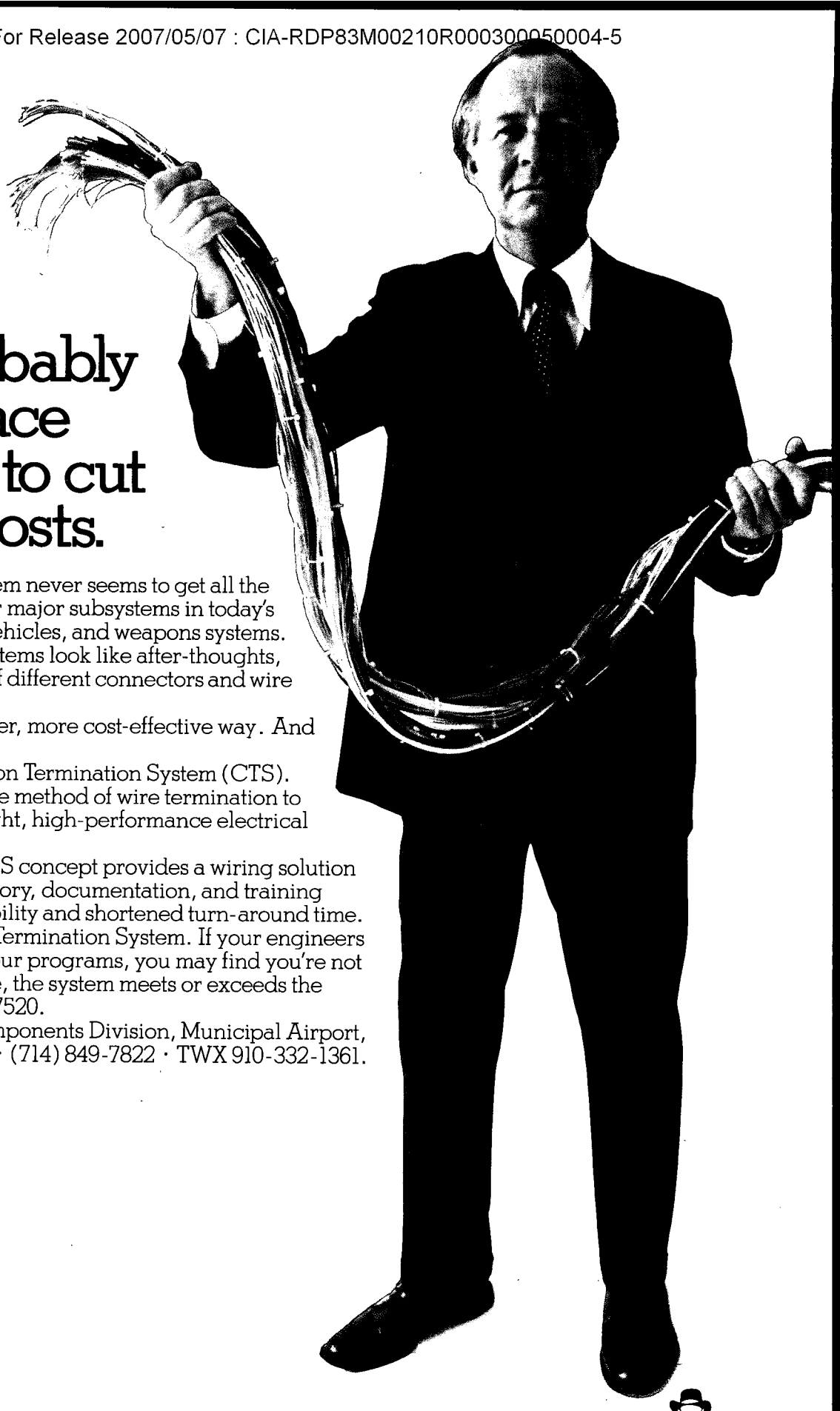
James C. Broadus
Controller
Alabama Dry Dock & Shipbuilding Co.
Mobile, AL

Paper Armies Are Nice, But . . .

■ I have been in two of our war mobilizations, and one does not make good forces from rosters or warm bodies. At present, the Army can no longer call out 17 divisions of the "inept, ill-trained, and unready" National Guard. In the course of their paper-chasing and force building, bureaucrats have managed to hash a number of those and sank them neatly. Each Army division needs a trained division base with its staff and technical units, its DivArty, and time to work as a team. You do not build such a team overnight, as one millionaire learned many years ago on the baseball field.

We had a similar experience with our skeleton forces in 1950, and it cost a lot of good troops until we got some field skills re-learned under fire. Paper armies are nice, but real live ones are the only ones with relevance.

John B. Conlon
Newark, OH



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Senate Approves $2.8-B in FY81 Defense Add-Ons; HASC Recommends Similar Adds

by Deborah M. Kyle

IN EARLY APRIL, the Senate endorsed the recommendations of its Armed Services Committee authorizing $2.8-billion in FY81 defense supplemental funding—a marginal cutback from the $3.04-billion requested by the Reagan Administration in mid-March. The House Armed Services Committee was less generous, recommending authorization of $2.64-billion, a 13% reduction from Reagan's proposed add-on.

Funding what Senate Armed Services Committee Chairman Sen. John S. Tower (R-TX) calls, "only those programs for which the Administration has provided a clear and convincing justification," the Senate cuts, an 8% drop from the Reagan supplemental request, include:

- Cancellation of the reactivation of the aircraft carrier USS *Oriskany*—$139-million in long lead funding was requested by Defense for FY81 (the Reagan Administration also asked for $372-million in reactivation money for FY82).
- Deletion of $96-million for seven additional F-18s over the 53 already authorized in the FY81 budget. Reagan requested $119-million for the seven aircraft in the FY81 supplemental. And,
- Trimming $15.2-billion of the requested funds to provide full "long-lead funding to support construction of an LSD-41 in FY82." In a March appearance before the Senate Armed Services Committee, Secretary of Defense Weinberger testified that, "Without these ships, we face a shortage of amphibious capability starting in the late 1980s and early 1990s." The Administration sought $34-million for LSD-41 FY81 add-ons.

The Senate version of the FY81 supplemental authorization also stipulated that $336.7-million of the total FY81 request for XM-1 tanks cannot be spent until the Secretary of Defense certifies in writing to both the House and Senate Armed Services Committees that, "He is satisfied with the results of the proposed durability testing to be conducted by the Army." Specifically, the Armed Services Committee wants assurance that performance test results dispell that any "unacceptable level of risk in terms of satisfying" the Army's operation requirements exists, and that such result supports procurement higher than the 360 already funded in the FY81 budget. DoD's FY81 supplemental requested an additional $447-million to restore all 569 XM-1s projected by the Carter Administration in January, 1980 for FY81.

Major changes in the House Armed Services Committee mark-up of the FY81 supplemental authorization include cuts in Navy shipbuilding and Air Force research, development, testing, and evaluation (RDT&E) accounts.

While the House Committee recommended fully funding reactivation of the *Oriskany,* it did not approve an $89-million supplemental request for reactivation of the battleship *New Jersey* which the Senate version funds. In addition, the House Committee also recommended deleting $21.8-million in supplemental funding for the LSD-41 and $149.9-million for the CG-47 Aegis crusier. In each of these cases, the House Armed Services Committee report notes that although the Committee supports all three items, it recommends that funds previously authorized but not appropriated in the current FY81 budget be utilized.

Procurement and R&D

Although no major new weapons systems were added to the FY81 supplemental by the Senate or recommended by the House, the former authorized $27.3-million in unrequested Air Force funds, including $19-million for an undisclosed missile buy as well as $8.3-million to cover special project research.

For aircraft accounts, the Senate approved a total of $892.23-million including

- $47.6-million for the Navy and Marines for long lead funding of the SH-2 LAMPS MK-1 antisubmarine helicopter, 40 T-34C/TH-57 training aircraft, as well as additional funds for F-14, CH-53, and A-6E accounts.
- $125-million for the Army which includes purchase of aircraft spare parts as well as UH-60 Blackhawk helicopters.
- $716.63-million for the Air Force to cover peacetime and war reserve spare part buys, aircraft modification, and long-lead funding for the A-10 and the Aggressor F-5F, five additional UH-60 helicopters; and for the F-15. (The Senate Armed Services Committee noted that F-15 add-ons were for air defense missions only, not to augment tactical fighter forces.)

The House Armed Services Committee approved a total of $950.4-million in aircraft procurement supplemental funding for FY81. For the Army as well as the Navy and Marines, the House Committee recommended authorization of the full amounts sought by Defense, $128-million and $143.6-million, respectively. For the Air Force, the House Committee approved an aircraft procurement level of $678.8-million, $37.8-million less than requested. Changes to the Air Force FY81 procurement account included $43-million in cuts

(continued on p. 10)

House Increases Reagan FY82 Budget Targets, Senate Expected To Do Same

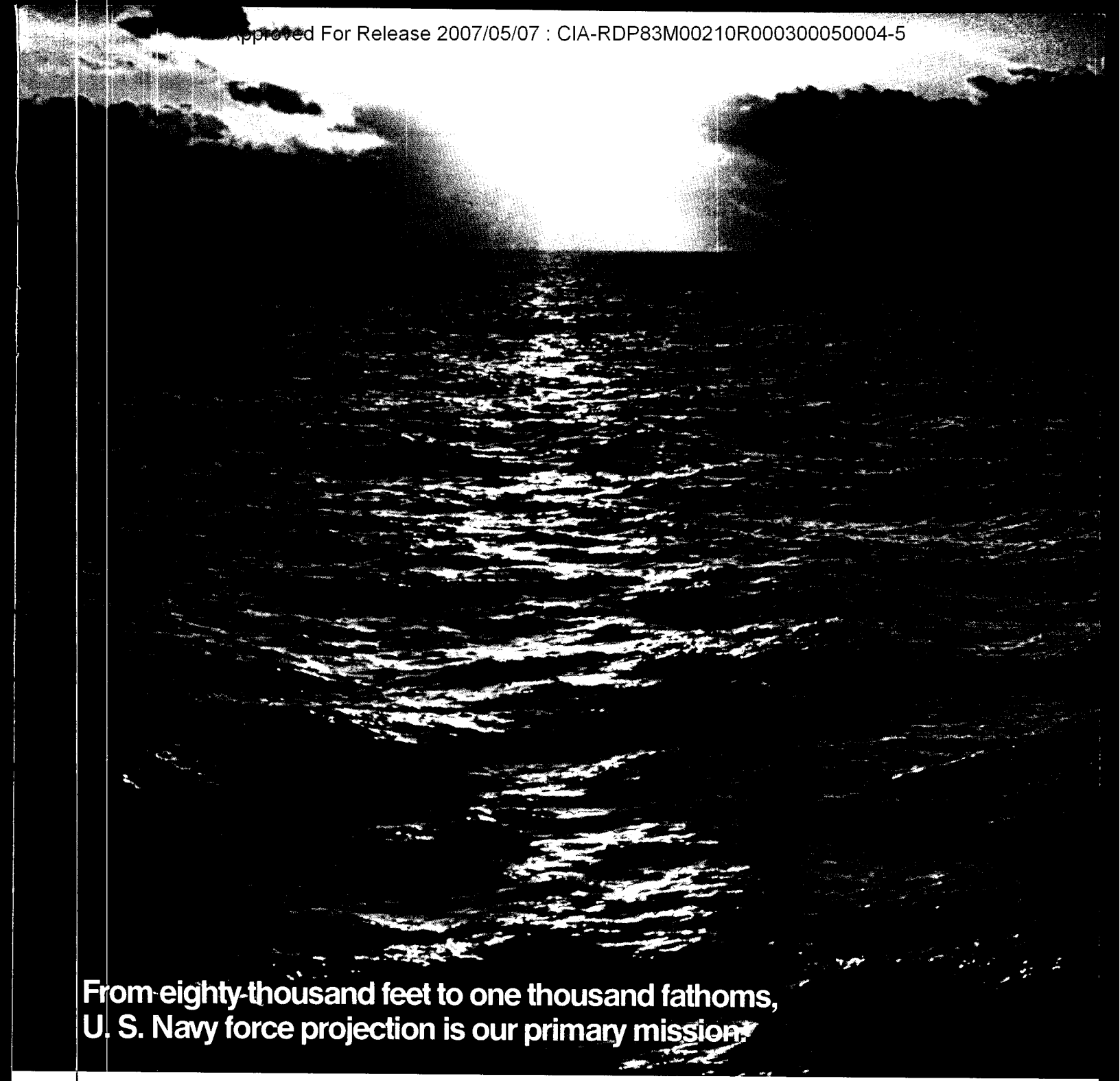
THE HOUSE RECENTLY APPROVED ITS FIRST Concurrent Budget Resolution for FY82, setting total budget authority at $785.8-billion and $713.6-billion in outlays—increases of $1.85-billion and $950-million, respectively, above the Reagan FY82 budget request.

For defense accounts, the House approved the amounts requested by Defense: $219.6-billion in budget authority and $189.75-billion in outlays.

Although the Senate Budget Committee had failed to approve its version of the First Concurrent Budget Resolution for FY82 as *AFJ* went to press, one Committee staffer told the *Journal* that the Committee wasn't ". . . inclined to buy the Reagan numbers," which were viewed as optimistic and unrealistic, and that the Committee would instead opt to increase the FY82 budget levels more in line with the House package.

During defense hearings earlier this year, members of the Senate Budget Committee, particularly ranking minority member and former Committee Chairman (when the Democrats were the majority party) Sen. Ernest F. Hollings (D-SC), expressed concern that the Defense Department was continuing what has proven to be a dangerous policy of basing budget requests on underestimated inflation assumptions. The Reagan inflation projections for FY82 and the outyears are lower than those projected by President Carter in his farewell budget request; figures which Reagan Administration officials criticized in testimony before both the House and Senate Armed Services Committees earlier this year. In fact, Secretary of Defense Caspar Weinberger told the Senate Armed Services Committee eight days after Reagan's inauguration that, "The inflation rates upon which those budgets [Carter's FY81 and FY82] are based are underfunded. They reflect a desired rather than realistic inflation rate."

The Senate Budget Committee concern is of a similar nature—since the Reagan defense targets are closely tied to the success of the Administration's overall economic plan. ■☆■



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Key Defense Appointees

DAVID S. CHU, 36, is Reagan's choice for Director of Program Analysis and Evaluation (PA&E), a new post which replaces the Assistant Secretary for PA&E slot, one of two Assistant Secretary positions abolished in Defense reorganization efforts earlier this year.

A 1964 undergraduate of Yale (economics and mathematics), Chu also holds an MA, M. Phil., and Ph.D. in economics from Yale (1965, 1967, and 1972, respectively).

Between 1968 and 1970, Chu served in the US Army, first as an instructor at the Army Logistics Management Center, and then in the Office of the Comptroller, 1st Logistical Command, Vietnam. He was discharged in June, 1970 in the rank of Captain.

From 1970 to mid-1978, Chu was senior economist and then associate head in the economics department for the California-based RAND Corporation. During that time, the new PA&E Director spent one year as lecturer, Department of Economics, at the University of California, Los Angeles (1972-73).

Since 1978, Chu has been Associate Director, National Security and International Affairs division for the Congressional Budget Office.

TIDAL W. (TY) McCOY, 33, has been named as Assistant Secretary of the Air Force for Manpower, Reserves, Affairs and Logistics.

A 1967 graduate of the US Military Academy, McCoy holds an MBA in Finance from George Washington University.

During his military career, McCoy served almost five years as an Army field artillery officer in command and staff roles in the US, Europe, and Vietnam. He was assigned to the Defense Intelligence Agency as political military analyst for North Vietnam and the National Security Council as a military intelligence reserve officer. As a civilian, he was then employed by CIA as an intelligence officer.

McCoy has worked full or part-time as a staff assistant for five Secretaries of Defense: Laird, Richardson, Clements (acting Sec Def), Schlesinger, and Rumsfeld. He has also served as a staff member of the National Security Council, as Scientific Assistant to the Assistant Secretary of the Navy for Research, Engineering and Systems as well as the Director of Policy Research in the Office of the Under Secretary of Defense for Policy. Since 1979, McCoy has served as assistant for national security affairs for Sen. Jake Garn (R-UT). Most recently, McCoy was a member of the Reagan Defense Transition Team.

RICHARD NORMAN PERLE, 49, has been named DoD's Assistant Secretary for Policy Planning, a post formerly listed as Deputy Under Secretary for Policy Planning and held by Walter Slocombe. Perle's new position offers an upgrade in responsibility, including development of DoD's NATO policy.

A 1964 undergraduate of the University of California, Perle also holds an MA from Princeton (1967). Prior to his appointment, Perle was associated with the Abington Corporation, a Washington-based consulting firm founded by Navy Secretary John Lehman. From 1972 to March, 1980, Perle was a professional staffer for the Senate Permanent Subcommittee on Investigations, as well as the Senate Armed Services Subcommittee on Arms Control. Before that, he spent six months on the staff of Sen. Henry Jackson (D-WA). From 1969 to 1972, Perle served as a professional staffer on the Senate Subcommittee on National Security and International Operations. Prior to that, he spent three months as Special Assistant to then Deputy Secretary of Defense Paul Nitze. Between 1967 and 1969, Perle served as senior political scientist for Westinghouse Electric Corporation's Defense and Space Center. From 1964 to 1966, Perle held several consulting and research positions including: consultant to Sandia Corporation (1966), professional researcher for the Institute of Naval Studies (1965), and research assistant for the Institute of Government and Public Affairs at the University of California, Los Angeles (1964).

VINCENT PURITANO, 51, has been selected as Executive Assistant to Deputy Secretary of Defense Frank Carlucci. Prior to his appointment, Puritano spent two years as Carlucci's special assistant at CIA. This is a new post: formerly, there was just one Special Assistant, who served both the Secretary and Deputy Secretary of Defense.

Puritano holds a BS in economics from Siena College (1959), an MBA from New York University Graduate School (1960), and an MPA from Harvard's John F. Kennedy Graduate School.

From 1947 to 1953, Puritano served in Korea with the US Air Force.

Between 1959 and 1960, Puritano worked as a management analyst for the New York State Thruway Authority. He then moved to Washington and spent the next nine years with the Office of Management and Budget where he was Director of intergovernmental relations. At the time, Carlucci was OMB's associate director.

Puritano then spent nine years (from 1969 until his move to CIA) at State, handling several Agency for International Development technical assistance programs.

JOHN H. RIXSE, III, 49, is President Reagan's choice to be Special Assistant to the Secretary and Deputy Secretary of Defense.

A native Washingtonian, Rixse holds an AB from Yale University (1963) and an MA and MALD from Harvard's Fletcher School of Law and Diplomacy.

Commissioned as an ensign in 1963 via Yale's ROTC program, Rixse served five years active duty including tours with the Atlantic and Pacific fleets as well as the Navy staff and the National Security Council staff.

In 1970, Rixse became Special Assistant to the Director and Deputy Director of Central Intelligence, a position he maintained until his selection as OSD's new special assistant.

RUSSELL A. ROURKE, 49, has been selected to replace Jack L. Stempler as Assistant Secretary of Defense for Legislative Affairs.

A native of New York City, Rourke holds a BA from the University of Maryland (1953) as well as an LLB from Georgetown Law Center (1959). Between 1953 and 1956, Rourke served with the US Marines in Korea and is currently a colonel in the Marine Corps Ready Reserve.

In 1960, Rourke worked for the Washington-based law firm of Keogh, Carey, and Costello. The following year he moved to Capitol Hill as an Administrative Assistant (AA) to former Congressman John R. Pillion. From 1965 to 1974, Rourke served as AA to former Rep. Henry P. Smith, III. Since 1975, he has worked as Administrative Aide to Rep. Harold Sawyer (R-MI). ■☆■

Add-Ons *(continued from p. 8)*

to modification accounts and $60.5-million to spare parts requests. The House Committee recommended $65.7-million in F-16 advance procurement funding not requested by the Reagan Administration to bring F-16 production rates to what it calls the "most economical and efficient rate—180 aircraft per year."

For tracked vehicles, the Senate approved a total of $1.096-billion for the Marines and Army, the full amount requested by DoD. The House Armed Services Committee approved $781-million for Army tracked combat vehicle accounts and $11.2-million for Marine tracked vehicles.

In research and development, a total Senate authorization of $590.6-billion provided FY81 add-ons of $79.5-million in Army funding; $139.9-million for the Navy and Marines; $339.2-million in Air Force accounts; and for Defense Agencies, $41-million, bringing the total FY81 RDT&E authorization to $16.6-million. The House Armed Services Committee recommended a total FY81 supplemental of $408.53-million for RDT&E increases: $83.96-million for the Army, $96.57-million for the Navy and Marines, $211.06-million for the Air Force, and $16.94-million for Defense Agencies. ■☆■

The $150-Billion Misunderstanding

by Sen. Ernest F. Hollings (D-SC)

Sen. Ernest F. Hollings (D-SC)

SEN. ERNEST F. HOLLINGS (D-SC) is ranking minority member of the Senate Budget Committee. Last year, in the Democratic-controlled Senate, Hollings served as Budget Committee Chairman and succeeded in engineering a $5.6-billion FY81 defense budget increase to offset what the Committee report called "the impact of the recession" and skyrocketing inflation.

PRESIDENT REAGAN PROMISES to buy and operate the military forces the US needs to meet its expanding obligations, counter the growing Soviet threat, and compensate for years of neglect in defense spending.

That's good news to one who has spent years in the Senate fighting for the right military capability and the proper defense budget levels for the United States. However, the President has underestimated the true cost of his FY82-86 defense program by over $150-billion. This hidden funding shortfall of 10% over his five-year budget projections is bad news all around. It will force the government to make some truly horrifying choices:

- **Stretch out procurement buys**, putting the brakes on projected defense build-up and perpetuating the inflationary cycle of low production rates and high unit costs; and pare operations to the bone, eliminating the increases in preparedness which the Reagan program seeks;
- **Abandon hope of balancing the federal budget** for the foreseeable future in order to meet the funding shortfall in defense, thus institutionalizing inflation;
- **Somehow squeeze another $30-billion a year** out of federal programs for the poor, elderly, and disabled; or
- **Increase taxes**, killing supply-side economics.

This is not a make-believe scenario. Our major allies, Britain and Germany, are agonizing over the same dilemma and are being forced by economic circumstances to cut both their social welfare programs *and* their defense programs.

If we cannot find a way to break this cost-spiral in defense, western security will be weaker in 1990. In short, we face a potential disaster.

I am convinced there is a better choice. But the problem won't be solved with voodoo economics which conjure away the ugly facts of inflation. The application of old fashioned, hard-nosed, managerial common sense in defense is needed. I call it supply-side defense economics.

The Reagan Defense Program: You Can't Get There From Here

Before we talk about solutions, we must understand the problem. President Carter's last defense budget projected a six-year total of $1,474.6-billion in budget authority and $1,361.0-billion in outlays for the National Defense budget function. (The function includes the military operations of the Defense Department, atomic weapons production, and miscellaneous small programs.)

President Reagan increases these six-year totals by $194.2-billion in budget authority and $118.1-billion in outlays. (The $76-billion difference in these two increases arises because a large part of the budget authority will go to weapons procurement which will be spent over a longer period than the six years.)

Under the economic assumptions of the Reagan budget, all of this increase is real. He asserts that the increase will buy approximately $200-billion more in defense goods and services than the Carter budget, measured in FY81 prices.

For example, in FY82, Reagan plans to add to the Carter budget about 300 aircraft; over 8,000 missiles, torpedoes, and artillery rounds; 287 new combat tracked vehicles; and six major ship combatants—including two ship reactivations. Though program details have not been made available, one must presume similar planned hardware buys in the outyears. This is a laudable goal and should be applauded by all concerned.

The trouble is, almost two-thirds of the Reagan *budget* increase is likely to be eaten up by inflation. In that case, the Defense Department will be unable to pay for its planned *program* increases.

It seems likely that Reagan and Cap Weinberger have developed their inflation numbers from a campaign document rather than by a scientific forecast based on empirical sampling of recent price increases in defense or a close look at potential bottlenecks that go hand-in-hand with the defense acquisition process.

Inflation in the defense budget, under the Reagan/Weinberger forecast, is consistent with the expectations of the Reagan Administration that its supply-side economic policies will reduce the inflation rate over the next five years.

Whatever the merits of a national economics policy based on the power of positive thinking, there is no reason to believe that defense prices will follow the forecast. Indeed, recent experience with prices in the defense budget raises the question whether "positive," or should I say "wishful," economic thinking works at all. The accompanying table compares forecasted with real price changes in defense purchases since FY74.

Defense Purchase Inflators: Forecast vs. Actual FY74-FY81

	FY74	FY75	FY76	FY77	FY78	FY79	FY80	FY81
Forecast (Current)	3.0	5.8	15.0	7.9	6.8	6.2	7.0	8.9
Actual (CBO Estimate)	7.5	12.4	8.0	10.2	7.9	8.7	15.0	12.0

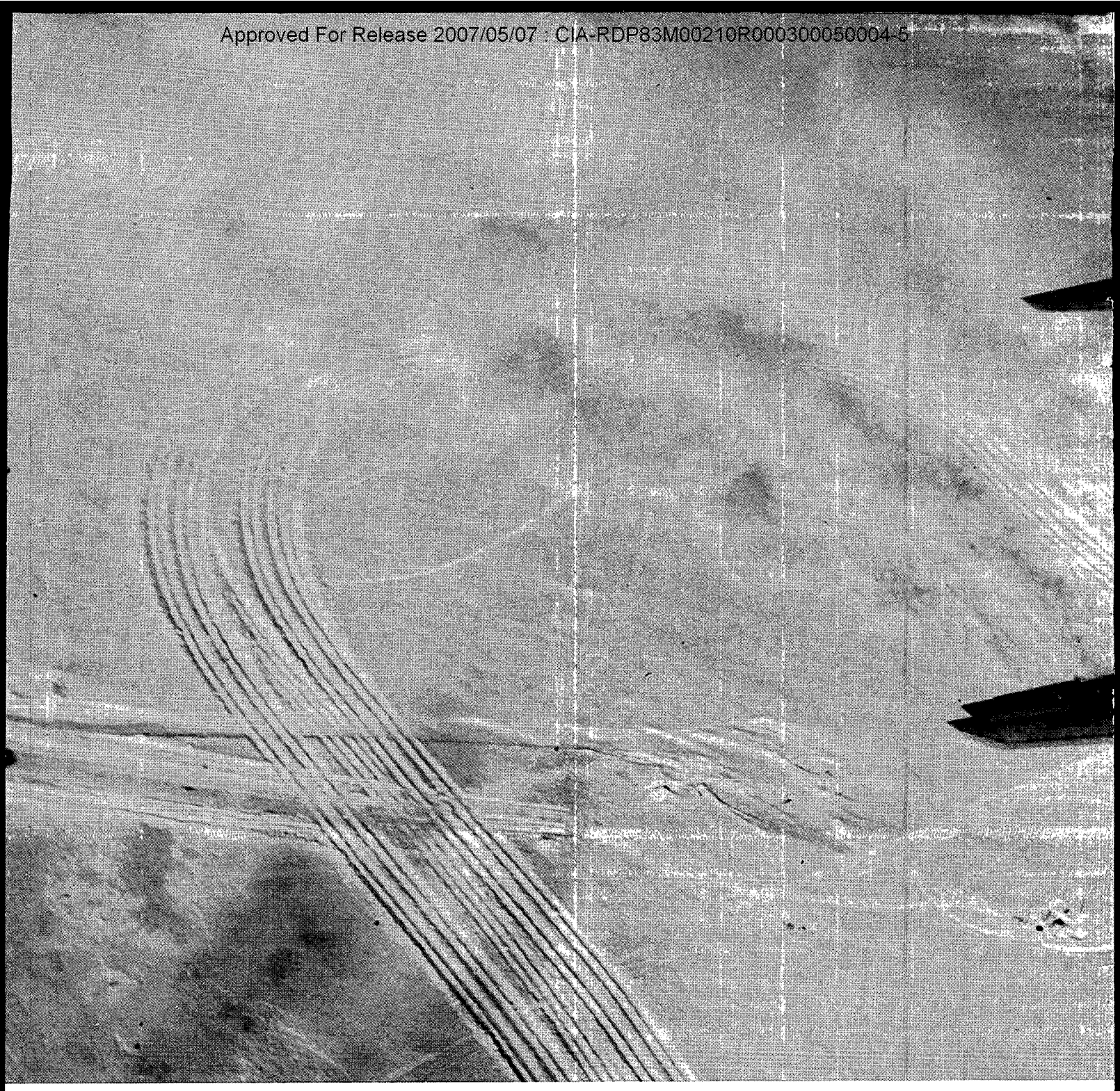
Note: FY77 includes the transition quarter.
Source: DoD Comptroller's Office.

The table shows that in every year but FY76, actual inflation exceeded forecast prices by substantial amounts. This pattern is even more devastating when one considers that it shows, for each forecast, only the first year of a five-year projection. Invariably, five-year price forecasts show declining rates in future years. This means that the Defense Department has had a particularly hard time coping with the 1977-81 rising price trend, since its expectations in FY77 called for falling inflation over that period. In other words, the FY77-81 program was terribly underpriced.

Although I am no econometrician, I feel confident in forecasting that the price estimates in the Reagan defense budget constitute wishful thinking.

The Congressional Budget Office, for example, assumes that inflation on defense purchases will average about 9.6% over the next five years. This is 3.1% higher than the average annual inflation estimate for purchases in the Reagan budget. If CBO's forecast is right, the Administration has underestimated its defense program cost by $124.5-billion through FY86.

That is only the beginning of the problem. CBO's forecast does not take into account the most recent cost increase in



How to pirouette with a half-

Good footwork is a must for a big airlifter, especially when it's packing a heavy load.

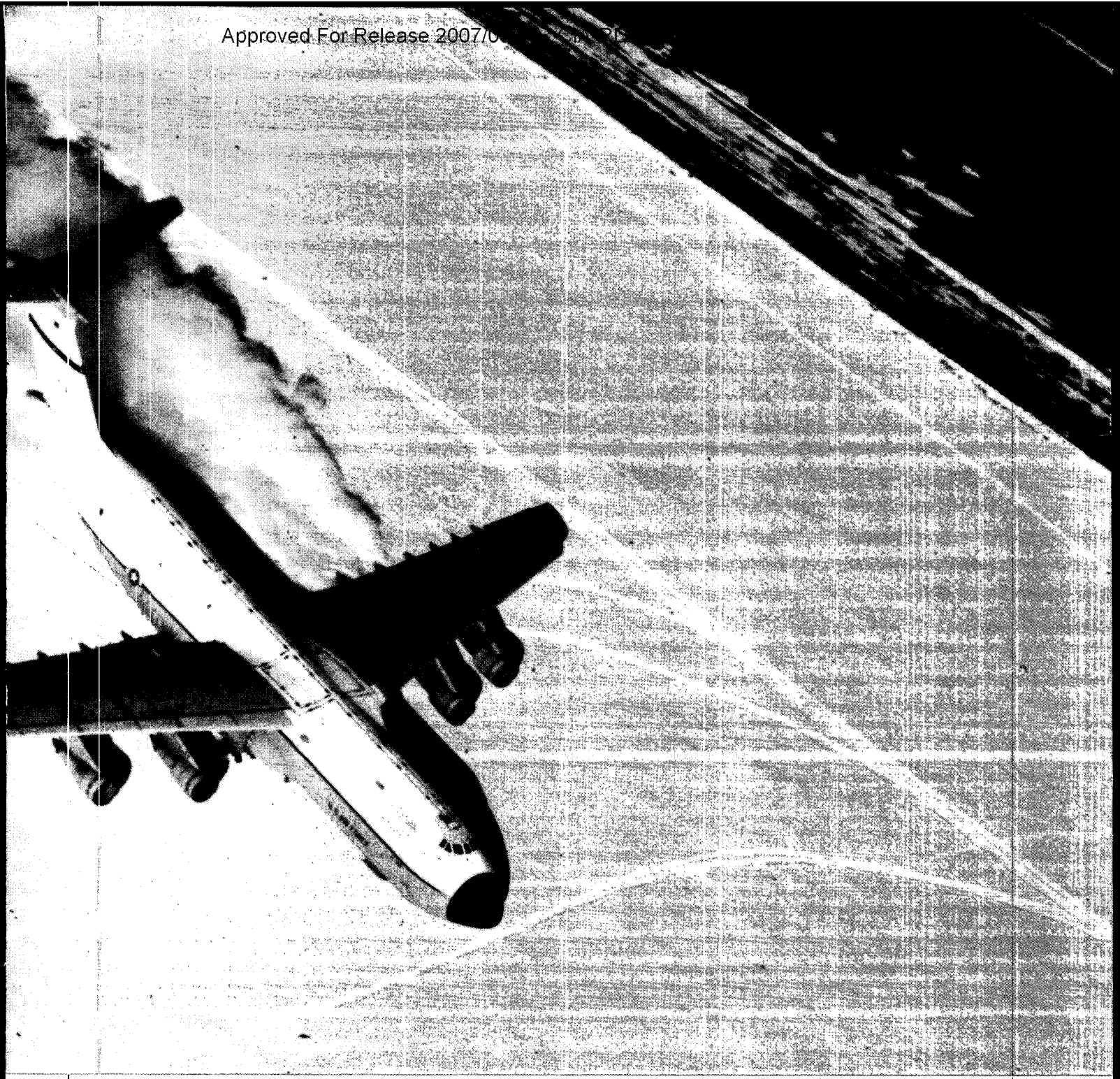
And the giant C-5, in tough, operational evaluations on four different off-runway terrains, has proved it can perform as intended... able to taxi, load and unload, and maneuver on various unpaved surfaces, like the snowy one you see here.

In a recent series of evaluations, the Lockheed C-5 went through its paces on snow-covered ground at Griffiss Air Force Base in upstate New York. The huge airlifter handled the mushy surface without any maneuvering problems.

Proving a soft touch.

Earlier evaluations at Shaw Air Force Base in South Carolina were made on dry, unpaved terrain, and the C-5 passed them handily. With no rutting, no skidding on turns, and with great ease of cargo-handling operations.

There were maneuvers on softer ground, too. At Altus Air Force Base, Oklahoma, the terrain was about the consistency of a natural-turf football field. There, in simulated combat conditions, loading and unloading on unprepared terrain was conducted without any problems. And on sandy



At Griffiss Air Force Base, a C-5 executes a smooth 180-degree turn off-runway in foot-deep snow.

million pounds on your back.

soil at Eglin Air Force Base in Florida, the C-5 again successfully demonstrated its unusual maneuvering capability.

In all the demonstrations, the C-5's gross weight reached up to 665,000 pounds. That equals carrying two 60-ton M-1 main battle tanks in the cargo hold.

New wings, new life.

In short, the C-5 has proved its off-runway ability on surfaces it might have to use in faraway places... places it can reach because of its inflight refueling and worldwide range. Furthermore, because of improved wings, the C-5's life-span will help keep America's airlift capability strong and global in range well into the 21st century.

Considering the C-5's size, range, capacity, and unmatched cargo-handling speed, you might wonder how it can be so light on its "feet."

It's because the engineers and craftsmen at Lockheed-Georgia designed it that way. They have more experience designing and building airlifters, by far, than anyone else in the world.

Lockheed-Georgia

major weapons systems. These alone could add up to $15-billion (estimate based on an extrapolation of the Five-Year Defense Plan submissions for January 1979, 1980, and 1981 by the Senate Budget Staff) to both the CBO and Reagan estimates for FY82-86, assuming that they are a one-time phenomenon. That is a dangerous assumption.

The unit costs of major defense programs are reaching intolerable levels and they continue to increase. The following examples compare the unit (per copy) costs of the total procurement buy of selected programs as submitted by DoD with its FY81 budget and with the most recent data compiled by DoD one year later.

The few relatively bright spots in this list of cost disasters are worth separate mention. With the exception of the F/A-18 program, our fighter aircraft production teams appear to be holding cost growth to about the national average rate of inflation. But even in these cases, the cost increases are higher than the average inflation on purchases estimated in the Reagan budget. I do not argue that the new

It seems likely that Reagan and Cap Weinberger have developed their inflation numbers from a campaign document rather than by a scientific forecast based on empirical sampling of recent price increases in defense.

Administration is responsible for these price increases—only that it is irresponsible in hiding from itself and the public the budgetary implications of runaway defense inflation.

With the rapid escalation in program unit costs, one wonders whether program management overview is being practiced at all within the Department of Defense, especially in the Navy and, even more, the Army.

In addition, we have not seen the end of the manpower cost-spiral. Personnel costs now eat up about 50% of the defense budget. The Reagan budget projects a declining share of manpower costs based, in part, on the expectation that pay inflation rates will drop about 5% in 1986. CBO thinks they are likely to be at least two percentage points higher, and this is reflected in CBO's cost projections. What is not reflected in those cost projections is the likely added cost of meeting Congressionally-mandated quality standards in recruitment if unemployment falls as rapidly as the Reagan budget predicts. If these recruitment and retention objectives are met, while competing in a tight labor market, by general, across-the-board pay raises (in addition to the 5.3% added pay raise proposed by Reagan for 1981), then as much as another $15-billion could be added to the cost of Reagan's budget. This projection was extrapolated from data developed by the CBO on the cost of management objectives on recruiting and career manning for FY82-86 as it appears in CBO's Jan. '81 *Resources for Defense*: A Review of Key Issues for FY82-86.

Projected Unit Costs

Total Program ($ in Millions)

Programs by Service	1981 Budget	Dec. 81 SAR	% Increase
Army			
Attack helicopter	$7.4	$10.2	37.8%
Blackhawk helicopter	4.3	5.5	27.9
SOTAS	8.7	28.0	221.8
Roland	0.5	1.2	140.0
Patriot	1.0	1.4	40.0
M-1 Tank	1.6	2.5	56.3
IFV	0.9	1.8	100.0
Navy			
EA-6B	$20.9	$25.1	20.0%
F/A-18	18.6	26.0	39.8
F-14	18.9	21.1	11.6
CH-53	12.8	19.5	52.3
SH-60B	13.4	20.3	51.5
P-3C	19.6	26.8	36.7
Trident Missile	11.6	16.3	40.5
DDG-47	922.2	1,125.0	22.0
Air Force			
F-15	$15.3	$16.6	8.5%
F-16	13.6	15.0	10.3
TR-1	21.4	27.6	29.0
GLCM	3.2	4.0	25.0

The wisdom of across-the-board pay increases such as the one proposed in the Reagan budget for July, 1981 is certainly questionable. The recruiting and retention benefits which flow from this pay increase (which will cost $10-billion over the 1982-86 period) could be achieved at less than half the cost by the use of bonuses, since a large part of the pay increase will go to career personnel who are on average well compensated. For example, under Reagan's pay proposal, senior O-6s (a colonel or Navy captain) will earn as much take home pay as a Cabinet member.

Many, though not all solutions to the problems our nation's defenses are facing in the next few years, lie in the practice of supply-side defense economics—the essence of which is to provide people with incentive to work, save, and invest in ways that increase productivity and combat inflationary cost-spiral.

When applied to the management of defense resources, supply-side economics means increasing *supply* of qualified manpower at the lowest cost, increasing *productivity* of the defense labor force, and increasing *efficiency* of defense procurement. The incentives which will achieve these objectives are both economic and social.

Manpower Initiatives

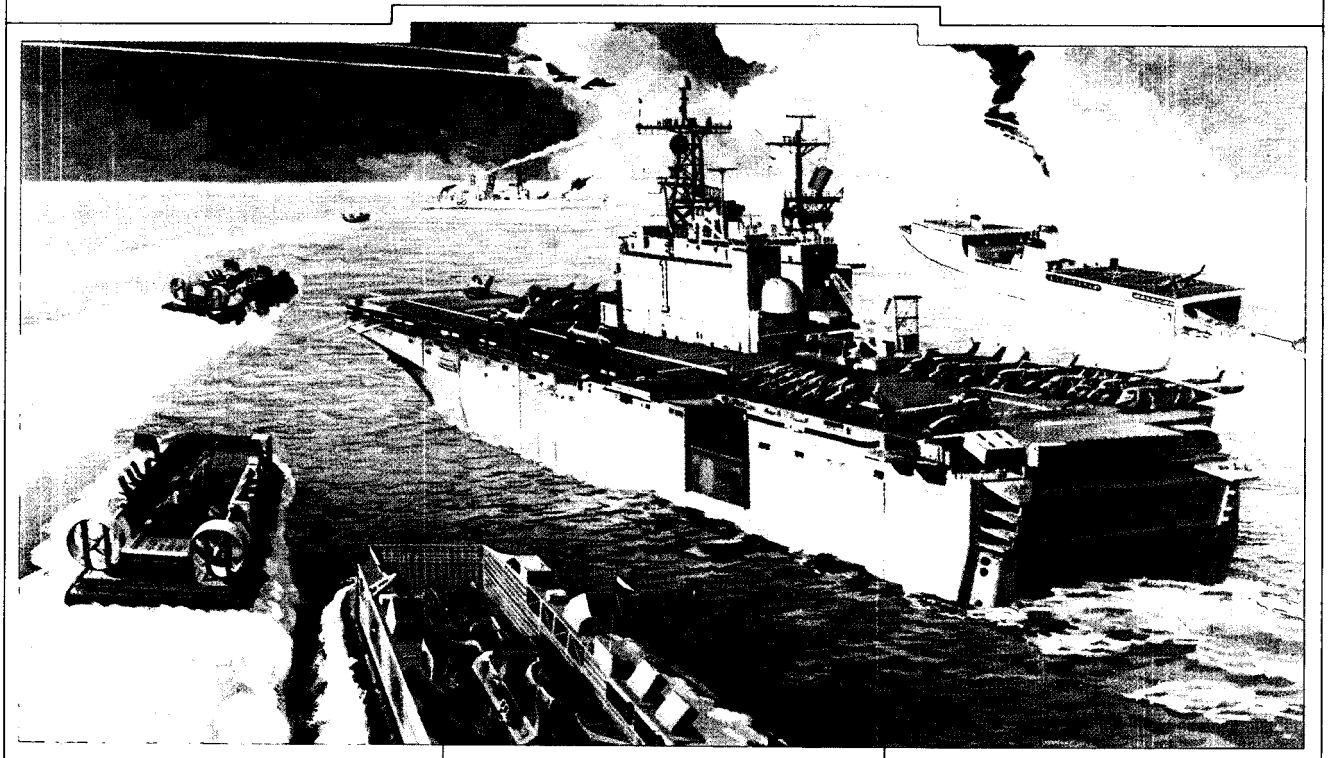
In the manpower area we must first reinstitute the draft. The need is clear. The new shipbuilding program envisioned by the Navy and the Reagan Administration could require over 100,000 men to man the additional ships we would build. Yet, the Navy is currently having a difficult time sending the ships it has to sea because of severe manpower shortages. And, as we succeed in improving our economic situation, the military manpower situation will worsen.

Under the current All Volunteer Force concept, one of our principal recruiting aids is higher unemployment. Many young men are entering the armed forces because there are no other jobs available. However, when these young men enter the Service, they select, and rightly so, the more highly specialized occupational specialities. This further exacerbates an already critical shortage in the combat arms—the men who will actually be called upon to do the fighting. It is difficult to envision a volunteer system where young men in large numbers will choose to carry a rifle, march long distances, and sleep in a muddy hole half filled with water.

So much for need. The principal reason for returning to the draft is one of equity.

One of the major criticisms heard during the war in Vietnam was that the war was being fought by the poor, the black, and the disadvantaged. And yet, we have institutionalized that system through the All Volunteer Force. The burden and privilege of defending this nation should be shared by all our people at every level of society.

Projection of Naval Power



The Navy's programs for projection and forward deployment of combat forces are under constant development. A key element is the amphibious assault. Maritime prepositioning, while intended for a non-hostile environment, can complement an amphibious assault. TRW provides systems support and continuity of technical development for related acquisition programs.

Specifically, these programs in support of the Amphibious Ship Acquisition Project, include the LHA-1 class Amphibious Assault Ship and the projected LHX...the LSD-41 Landing Ship Dock...LCAC Landing Craft Air Cushion ...TAKR-X Fast Logistic Ship...and TAKX Maritime Prepositioning Ship.

The support provided by TRW involves assistance in acquisition planning; cost and technical risk analyses; reliability and maintainability plans; logistics and test support; and documentation throughout the system life cycle.

TRW is a leader in naval warfare systems engineering and integration, C^{3}I, satellite communications, and advanced electronics. This broad know-how enables TRW's naval engineers to contribute a wealth of expertise to the solution of problems in the projection of naval power.

If you're interested in joining our team, contact W. G. Izabal, W1/1516A, 7600 Colshire Drive, McLean, Virginia 22102. Phone: (703) 734-6283.

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Secondly, we must enact a meaningful GI Bill, including a transferability provision of unused benefits to a dependent. This will attract an increased number of high school graduates into service and will assist in retaining the career, middle-level, noncommissioned officers needed to train and lead our fighting men. The cost of such a GI Bill is far less than that of across-the-board pay increases.

Third, we must review our entire pay and benefits structure, with the objective of compensating military personnel on the basis of skills rather than rank. Large, across-the-board pay increases based on longevity are not only the most expensive way to solve the general manpower problem, they may be undermining our efforts to retain the critical skills that our forces desperately need.

O&M Initiatives

In the area of operations and maintenance, we must accept the fact that some of our equipment has become so complex that it is not easily maintainable even with high quality manpower. While some US weapons may be needlessly complex, it is absolutely critical that we maintain our technological edge. Therefore, the US should move toward increased use of more productive contractor maintenance, utilizing modular components whenever possible. It is an old adage that civilians should not serve in a war zone. This rule ignores the experience of Vietnam. Furthermore, with fuel costs for the Department of Defense now approaching $12-billion annually and with no end to the increases in sight, fuel economy must become a major factor in the design and procurement of all non-combat aircraft and vehicles.

Procurement Initiatives

In the procurement picture, we can expect to continue paying for some cost growth. However, there are ways to blunt the impact. A primary and relatively simple approach to this problem is to change the way our Services (and the Army in particular) view the management of their major acquisition programs. All too often, the job of program manager is viewed as a major detour, if not downright red light, on the road to career advancement. The traditional, so-called ticket punching route to general officer or admiral is designed at each step to identify a man's leadership capabilities in traditional military activities. In the Army, for example, the brightest young officers progress from company commander as a captain through Command and General Staff College, battalion command, senior war college, brigade command, and then general officer. The Services must be persuaded that successful management of a multi-million or billion dollar program is at least as good an indication of leadership qualities and flag rank potential as the ability to lead several hundred men in the field or at sea.

The largest dividends in correcting the defense budget, of course, will come from the most difficult decisions. We, the Congress and the Executive, must have the courage to write off marginal investments. Too often, programs that are poor performers in the R&D phase, go to procurement on the rationale of maintaining our industrial defense base (or satisfying a major campaign investor at home). The Department of Defense can no longer perform the role of employer of last resort for economically depressed Congressional districts.

In the same vein, Congress should encourage the most efficient methods of procurement and production. Stretching out weapons procurement saves money in the near-term but makes unit costs higher, so in the end we buy less equipment than the Services need without realizing commensurate budgetary savings.

With the rapid escalation in program unit costs, one wonders whether program management overview is being practiced at all within the Department of Defense . . . .

The Defense Department should be encouraged to study and report on the feasibility of reducing costs by obtaining second sources on major production runs. Savings from price competition often outweigh the costs of building a second production line.

Additionally, a careful reexamination of Defense roles and missions to eliminate duplication during the acquisition process is necessary, both inter- and intra-Service. For example, there are, including those developed by NATO Allies, several dozen systems to kill a tank. Is it necessary to sustain the cost of research, development, testing and evaluation, and procurement for all of them? I don't see why.

Finally, we should learn to put first things first. Currently, our military planners are charged with sizing and equipping the forces to meet a range of contingencies including a major war in Central Europe, and a lesser war in the Indian Ocean and/or the Western Pacific. By and large, they do a first rate job of planning for what some believe to be an impossibly ambitious task. However, additional weight in the procurement decision process should be given to providing systems for the most probable or lesser conflict. The ability to fight successfully the most probable or smaller war will most certainly have the added benefit of making the major war less likely. ■☆■

Pentagon/Services

GAO Backs DLA On Second Source Chemical Protective Glove Production

THE LEGAL BATTLE over who can and can't produce chemical protective gloves which are desperately low in military inventories today, continues despite last month's ruling by the Government Accounting Office (GAO) in favor of a government agency's actions to establish a second production source.

In April, *AFJ* reported on the legal dispute between the Defense Logistics Agency (DLA)—the government agency charged with procuring the special gloves —and the present sole source supplier, Norton Corporation.

Under a section of the military procurement laws called "Exception 16" to the Defense Acquisition Regulation, government procurement agencies are permitted to set up second sources without competition when the agency head deems it is in the interest of national defense.

Butyl gloves are presently produced in quantities well below even peacetime needs. And, although Norton is producing the quantity stipulated for in earlier contracts well within the time frame specified, it would be unable to meet all DLA glove needs with existing facilities.

Thus DLA tried to award a production contract to Brunswick Corporation last December. Norton protested the award on the basis that the signature on the Exception 16's D&F (determination and finding) was not that of the statutory head of the agency (former Under Secretary of Defense for Research and Engineering William J. Perry signed the D&F), and that DLA had not shown sufficient need to establish a second source.

The courts issued a temporary injunction in January, 1981, and requested an opinion from GAO concerning the propriety of DLA's second source award. In early April, GAO supported DLA as well within its rights, noting that the briefs filed by DLA left no doubt that the Secretary of Defense had the authority to sign the D&F, to procure military supplies and that this authority could be delegated.

GAO also supported the use of separate sources rather than expanding Norton's present sole source capacity as necessary to protect DoD from disruption in deliveries or other events.

Battle Continues

Government officials had hoped that after the GAO decision Norton might feel there was little hope in pursuing this further in the courts, but one official told *AFJ*, that was "apparently was not the case." One week after GAO delivered its decision, Norton filed with US District court in South Carolina (the Court that granted the original injunction) challenging a motion for a protective order submitted by the government earlier this year. In its motion, Norton contends that depositions taken "under the constraints of preparation for a hearing on the preliminary injunction raised, but did not answer, critical factual questions concerning the propriety of the [December, 1980] D&F."

Political Pressure?

AFJ has learned that Norton representatives spent three hours restating their case to Under Secretary of Defense for Research and Engineering Robert Trimble on April 2nd, the day after GAO's decision, in a meeting arranged by Sen. Strom Thurmond of South Carolina, where Norton's production facilities are located. Last month, the *Journal* reported that some DoD officials felt Thurmond, among others, had exerted "unusual pressure" on Defense in Norton's behalf concerning glove contracts.

However, in early April, the Acting Assistant Secretary of the Army for Research and Development and Acquisition, Arthur Daoulas, to whom Thurmond had previously written requesting to be "advised prior to issuance of a formal award," responded to the *Journal*'s article to "clarify my perception of what you referred to as political pressure." Daoulas noted:

(continued on p. 22)

Army Chopper Bids Weigh More Than It Does

TWO CONTRACTORS have submitted 2.8 tons of paper proposals for a small Army targeting helicopter that will weigh only about 1½ tons at take-off. Averaged together, each of the proposals weighs almost as much as the "off-the-shelf" machine the Army hopes to buy, a light observation helicopter modified with night vision devices, laser target designators and a mast-mounted sight that will let it hide from the enemy while directing precision-guided artillery and missile fire.

Bell Helicopter and Hughes Helicopters have been vying for the program, called Advanced Helicopter Improvement Program (AHIP), with updated versions of their respective OH-58C and OH-6 scout helicopters. *AFJ* wrote in January that the "New Army Targeting Helicopter May Weigh More Than the Paper Behind It." The Army's Deputy Chief of Staff for Research, Development, and Acquisition, Lt. Gen. Donald R. Keith, replied in *AFJ*'s February Defense Forum that, "I personally would not draw the conclusion that the paper required by the revised RFP [Request for Proposal] will weigh more than the helicopter itself. . ." As one senior Army official remarked, "The Army shouldn't be penalized for what the Xerox machine does." A single copy of one proposal weighs 99 lbs.; a single copy of the other weighs 74 lbs.

The two bids were delivered to the Army on April 9th. One proposal entailed 70 volumes, most of them submitted in multiple copies, and totaled close to 650,000 pages and 3,500 lbs. of paper. (The AHIP helicopter will probably weigh under 3,000 lbs. at take-off when configured for combat.) Any one complete copy of that proposal would be about nine times as long as the Holy Bible. If all of that proposal's pages were laid side-by-side, an Army evaluator would have to walk a 328-mile round trip to read it—184 miles just to read one side of each sheet.

The other proposal entailed 55 volumes totaling about 6,700 pages per set, and weighed about 2,100 lbs. when the multiple copies required were delivered to the Army's Aviation Research and Development Command in St. Louis. The two firms have invested close to $10-million readying their bids. In contemporary dollars, the cost per pound of proposal is seven times the cost per pound of the helicopter itself. (That number is not as surprising as it may sound at first, since the proposals involved significant company-funded engineering and design efforts before the proposals could even be written; that kind of design work is far more costly than the manufacturing hours required to produce a pound of helicopter airframe.)

The Army hopes to award an AHIP contract to one of the firms in July and have the new helicopter targeting system operational late in 1985. It hopes to buy somewhere between 208 and 720 AHIP systems at a cost of under a million dollars each in 1981 dollars. Army procurement officials told *AFJ* in December they hoped to "skin" down the RFP's extensive documentation requirements, but acknowledged they were "asking for more detail up front in this RFP because. . . we see this as a relatively low risk development with an opportunity to control costs." Such cost control could be crucial to the program's eventual success or failure, since AHIP is currently one of 41 new Army hardware programs, Army officials acknowledge, that is underfunded in the Pentagon's current five-year plan. Thus, it could not be procured unless the Reagan/Weinberger defense budget review now underway for Fiscal Years 1983-1987 results in significantly larger funding than is presently forecast to be available. ■☆■

Weapons/Research

GD Refutes Navy Allegations of Mismanaged Sub Programs

by Deborah G. Meyer

IN A TERSE REBUTTAL to Navy charges that the Electric Boat Division of General Dynamics is responsible for serious delays in the SSN-688 class and Trident submarine programs, P. Takis Veliotis, general manager of Electric Boat, accused the *Navy* of being responsible for the program delays—primarily because of defective government-furnished equipment and design changes which the Navy required.

Going one step further, Veliotis said that Electric Boat is planning to bill the Navy up to $100-million for costs of faulty workmanship, covered under standard insurance provisions included in all Navy shipbuilding contracts (the Navy acts as the insurer and keeps the millions in premiums). According to the Navy, however, its insurance premiums do not cover faulty workmanship, even if commercial insurers do.

By awarding three new SSN-688 class submarines to Newport News Shipbuilding—a move made by Navy Secretary John Lehman on March 17th (April *AFJ*)—Veliotis charges that "basic principles of fairness seem to have been cast aside," and that the "national interest will not be served by penalizing Electric Boat for past problems which have now been solved."

While Veliotis was testifying before the House Armed Services Committee's Seapower, Strategic and Critical Material Subcommittee, David S. Lewis, Chairman and Chief Executive Officer of General Dynamics, was writing a reply to Lehman's March 17th letter expressing "doubts" about GD's performance on the sub programs. Lewis said, "While Electric Boat has had its problems in the past, Electric Boat is currently performing well." He added that Lehman's decision to award the 688-class contracts to Newport News is "very painful to us, particularly in view of this company's capital investment over the past several years of $280-million in new machinery, equipment, and buildings."

Defective Equipment

Veliotis in his testimony cited some examples of faulty government-furnished equipment and how it caused delays:

- In mid-1980, the government-furnished main propulsion equipment encountered so many problems on the 688-class that the Navy directed Electric Boat to check 45 different potential trouble spots.
- In the case of government-furnished generator sets, Electric Boat was ordered to check 65 potential trouble items.
- In 1979 and 1980, a total of over 8,000 "GFE" reports, (notice of defect in a piece of government-furnished equipment) were submitted by Electric Boat to the Navy. Over 750,000 manhours were spent correcting government responsible deficiencies.
- During design reviews over the past eight years, Electric Boat warned the Navy of the high risk involved in using a large, newly-designed valve in the ship's emergency control system. Each time, the Navy ordered them to proceed with the aforementioned valve, Veliotis noted. During testing it was proved that the valve indeed would *not* work. After a good deal of time was spent trying to redesign and repair the valve, Electric Boat was eventually left with no alternative but to proceed with other, less complex valves.

Design Changes

According to Veliotis, Electric Boat was still receiving design changes during the final testing phases and even during systems turnover to the Navy. By February, 1980, Electric Boat realized that because of the 20 or so revisions they were receiving *each day*, the *Ohio*—the lead Trident submarine—would be seriously delayed. As a result, the company formally recommended daily meetings with the Navy Supervisor of Shipbuilding to review the changes. Said Veliotis, "The Supervisor *refused* to participate in such meetings—instead we were required to perform *all* changes we received—*notwithstanding cost and schedule impact.*"

What The Navy Didn't Say

V. Adm. Earl B. Fowler, Jr., Commander of Naval Sea Systems Command, told the House subcommittee earlier in March that serious quality control problems at Electric Boat were the primary source of delays in the two submarine programs. Three problems specifically mentioned were improper grades of steel—some used in critical locations; defective structural welding which needed to be repaired or replaced; and improper or defective paint.

Veliotis addressed each charge separately:

- Nonconforming steel was discovered by General Dynamics during an internal audit. None of it was used in the pressure

(continued on p. 22)

DoD Proceeds with Austere ELF

by Deborah G. Meyer

ALTHOUGH THE NAVY has expressed concern over the expense and survivability of the Extremely Low Frequency (ELF) submarine communications system, the Defense Department has announced that it will reactivate the project near Clam Lake, WI, with funding set at $34.8-million. President Reagan has ordered DoD to test and operate a limited version of the controversial system, in response to Chief of Naval Operations Adm. Thomas B. Hayward's request that the project be kept in a caretaker status pending a decision on a longer range plan. Secretary of Defense Caspar Weinberger will submit recommendations to President Reagan in early August, following a reexamination of the country's overall strategic command and control systems.

According to OSD, the program will be restricted to the ongoing 130-mile "austere" ELF program now underway at Clam Lake and a related underground 28-mile antenna array, with any further expansion to be made only after careful evaluation. An IOC is expected this fall.

A spokesman for the Navy told *AFJ* that a March 19th memo from Adm. Hayward to the Secretary of the Navy, and a subsequent letter from Under Secretary of the Navy Robert J. Murray to Weinberger, "focus on [ELF's] expense and survivability." The Navy did *not*, the spokesman stressed, recommend that the program be scrapped, noting its necessity as a "strategic deterrent."

However, Peter Lennon, Sen. Carl Levin's (D-MI) legislative assistant for defense policy, told *AFJ* that other sources report that Hayward's recommendation to Murray was that ELF not be deployed in Michigan, but that it should be maintained in Wisconsin. His concerns were that it lacked survivability, the data link was too slow, and that it "was not worth the money." Lennon said that Murray also expressed doubts about the high cost and survivability problems in his letter to Weinberger, and questioned the wisdom of spending $500-million on a non-survivable system. The limited system that is presently being tested will cost only $79-million.

Under the Carter Administration, the ELF program was placed under caretaker status, with funding withheld in FY79 and FY80 despite strong statements made by then Secretary of Defense Harold Brown and Under Secretary of Defense for

(continued on p. 22)

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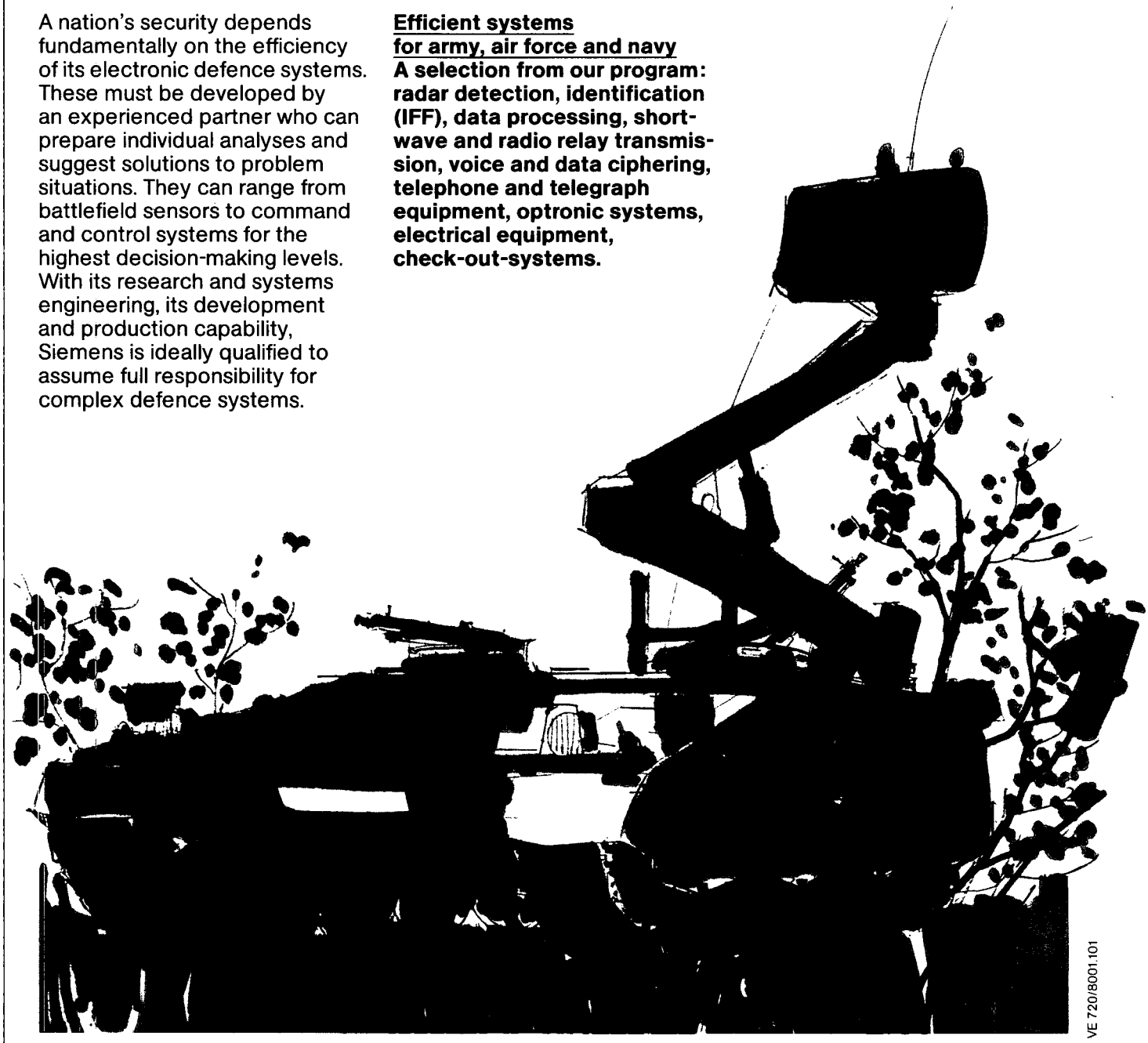

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FACT: Middle Eastern cities are often protected by wheeled vehicles, while tracks are deployed in the desert.

FACT: During U.S. Army Armored Reconnaissance Scout Vehicle tests of wheels vs tracks, the wheeled vehicle had nine times more mission function failures than the tracked vehicle. On a cross-country course, the wheeled vehicle became immobilized 14% of the time. The tracked vehicle *always* completed the course.

FACT: During military cross-country tests, wheeled vehicles had *more maintenance problems* than equivalent weight tracked vehicles.

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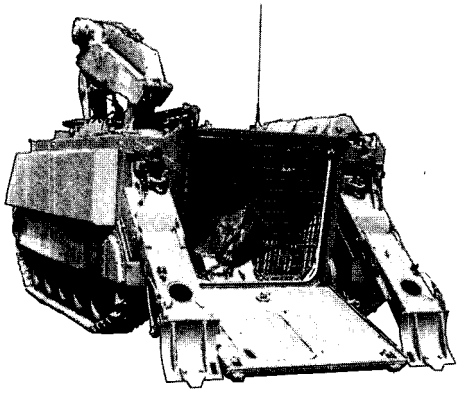
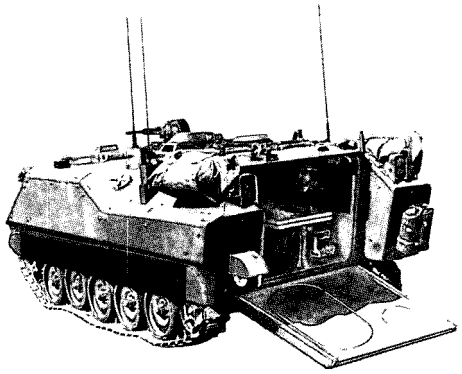
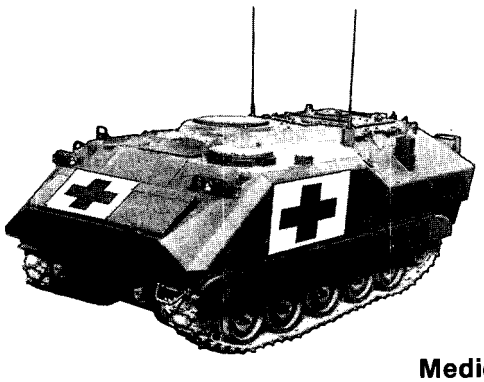
A Family of Tracked Vehicles for the RDF



Recovery Vehicle



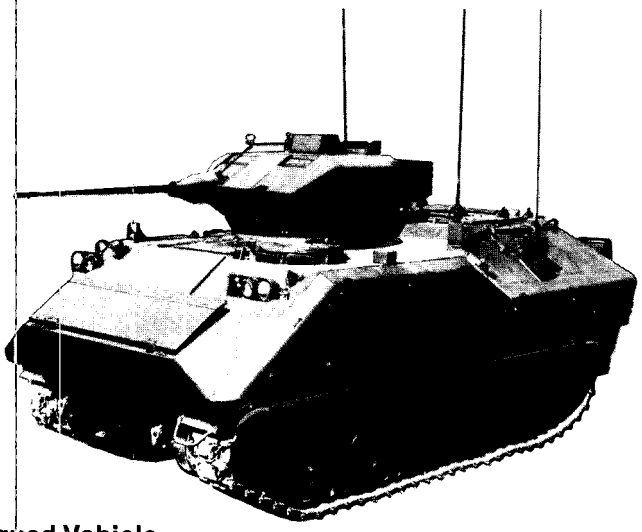
Command Post Vehicle



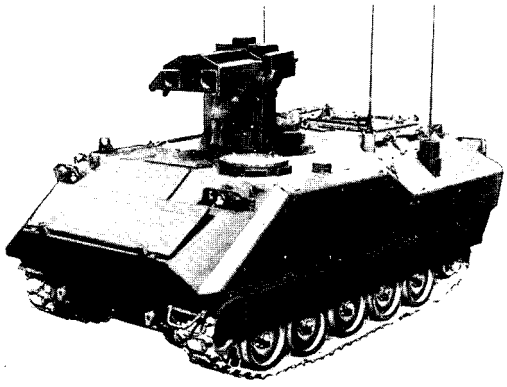
Medical Evacuation Vehicle

RDF Solution

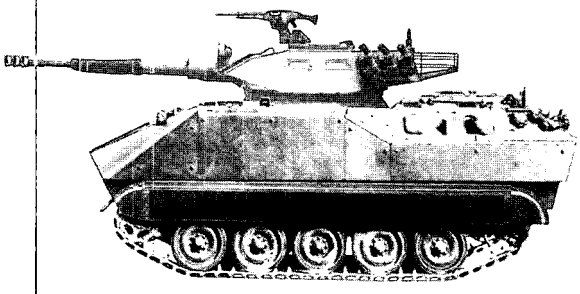
San Jose, California



Squad Vehicle



TOW Missile System Vehicle



Assault Gun Vehicle

Logistic Support

Most components of this family of vehicles are now in a worldwide supply system. The repair manuals and training programs are troop tested. Because of this, NATO interoperability is assured.

Mobility

The 260 hp turbocharged diesel engine and type classified high strength torsion bar suspension system gives this family of vehicles excellent mobility. The 29,000 pound vehicle with quick acceleration and dash-to-cover capability improves survivability. The selection of this family of tracked vehicles by over 44 Free World countries attests to its worth.

Firepower

A one-man or two-man turret is available. Either uses the M242 25-mm dual-feed automatic cannon and the M240 coaxially mounted machine gun. The type classified ammunition is the same used on the M2/M3 fighting vehicles. Adding the TOW missile launcher is an option for the two-man turret.

Five individual firing and observation ports permit troops to fire their individual weapons from the squad vehicle. A variety of antitank weapons can be carried in the vehicle.

This family of tracked vehicles is in production in San Jose and available for the RDF.

FMC **Defense Equipment**

Sub Programs *(continued from p. 18)*

hull or where it could affect submarine safety. According to Fowler, there were 126,000 locations where nonconforming steel *might* have been used on the *Ohio* alone. In actuality, only 41 pieces were replaced, weighing a total of *50 pounds,* out of a total of 23,600,000 pounds of steel used on the *Ohio.* Says Veliotis, "The nonconforming steel problem had *no delay effect whatever* on Trident ship deliveries."

- The welds discovered in 1979 by Electric Boat and the Supervisor of Shipbuilding on the 688-class sub did not affect the pressure envelope, Veliotis stressed. "The statistical data provided . . . was not correct." Of the 74,100 total welds (not 17,792 that Fowler mentioned) only 2,502 or 3.4% needed to be replaced or repaired, and over 50% of those involved minor cosmetic defects only.
- Less than a 5% actual breakdown in paint occured on the *Ohio,* not 25% as has been previously suggested. This breakdown, according to Veliotis, was a result of epoxy paint initially being applied in winter. Epoxy paints require warm temperatures to cure properly. Once it was decided that repainting was necessary, Electric Boat devised an alternative painting scheme which was rejected by the Navy. As a result, the epoxy paint was again applied in the winter. Said Veliotis to the Subcommittee, "I will not be surprised, and you shouldn't be either, if at some later date deterioration is again found to have occurred."

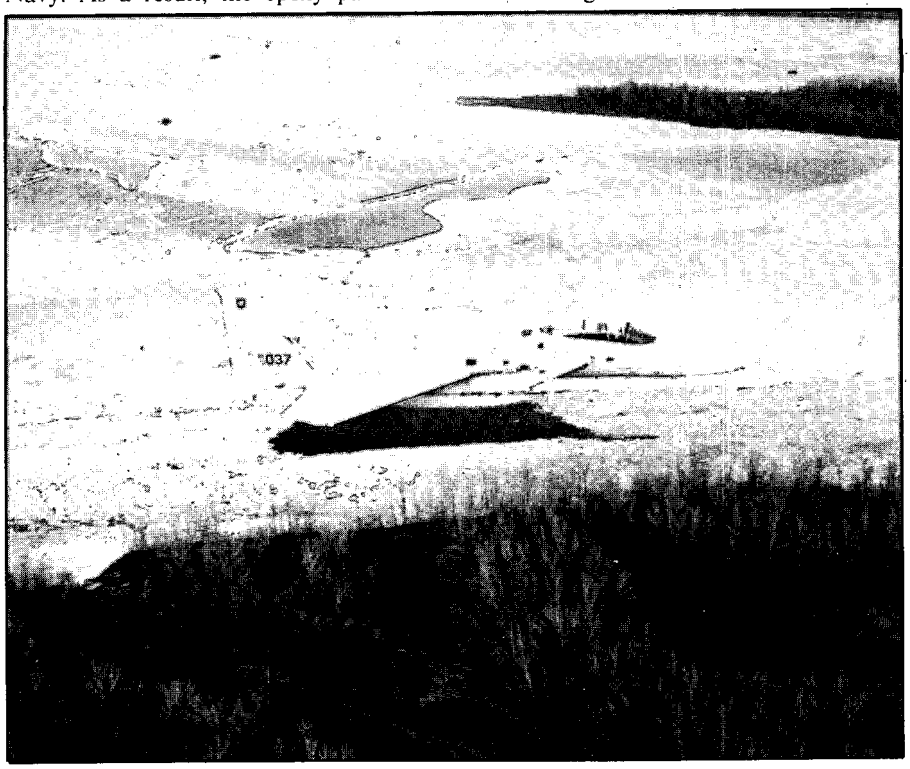
Fowler's Response

The day after Veliotis' initial testimony, V. Adm. Fowler appeared once again before Congress, stating now that he could make a "somewhat more positive statement" about Electric Boat. In light of Lewis' letter and Veliotis' testimony, said Fowler, "we can continue to carry out the program," adding that since General Dynamics is now willing to commit to "demanding milestones," he now views Electric Boat as "a reliable supplier of high quality submarines for the US Navy." ■☆■

ELF *(continued from p. 18)*

RDT&E William Perry in support of ELF. Although Carter agreed with DoD's assessment that a system like ELF was "vital," he repeatedly deferred a go-ahead on the system; some say that was because of his 1976 promise to citizens of Michigan not to proceed with the system against their wishes (Dec. 1978 *AFJ*).

The Navy has been working on project ELF for over 20 years under the project names Sanguine and Seafarer. ■☆■



IS THIS MAN CRAZY!?! According to John J. McGrath, Director of Public Relations for McDonnell Aircraft Company, most of the people who see this photo swear that the pilot of the F-15 is gliding along at 5-6 ft. above a gravel road bordered by a pond on one side and weeds on the other. Actually the plane is flying at several *thousand* feet altitude; what appears to be a pond is Alton Lake in Illinois; what seems to be weeds are trees; and the little gully at lower left is a full-fledged river. The false effect is caused by what seems to be a shadow below the aircraft. It is actually an ice-free section of the lake near the shore, the shape of which happens to approximate the F-15. (Photo taken by McDonnell Douglas photographer Mick Gillespie.) ■☆■

MEMO

THE ARMY'S INFANTRY AND CAVALRY fighting vehicles (IFV/CFV) and Multiple Launch Rocket System (MLRS) will enter second year production under a $200.8-million contract awarded by DoD to FMC Corporation. Under the contract, a total of 300 IFV/CFV and 32 MLRS vehicles are to be delivered between May of 1982 and February of 1983. ■☆■

Gloves *(continued from p. 17)*

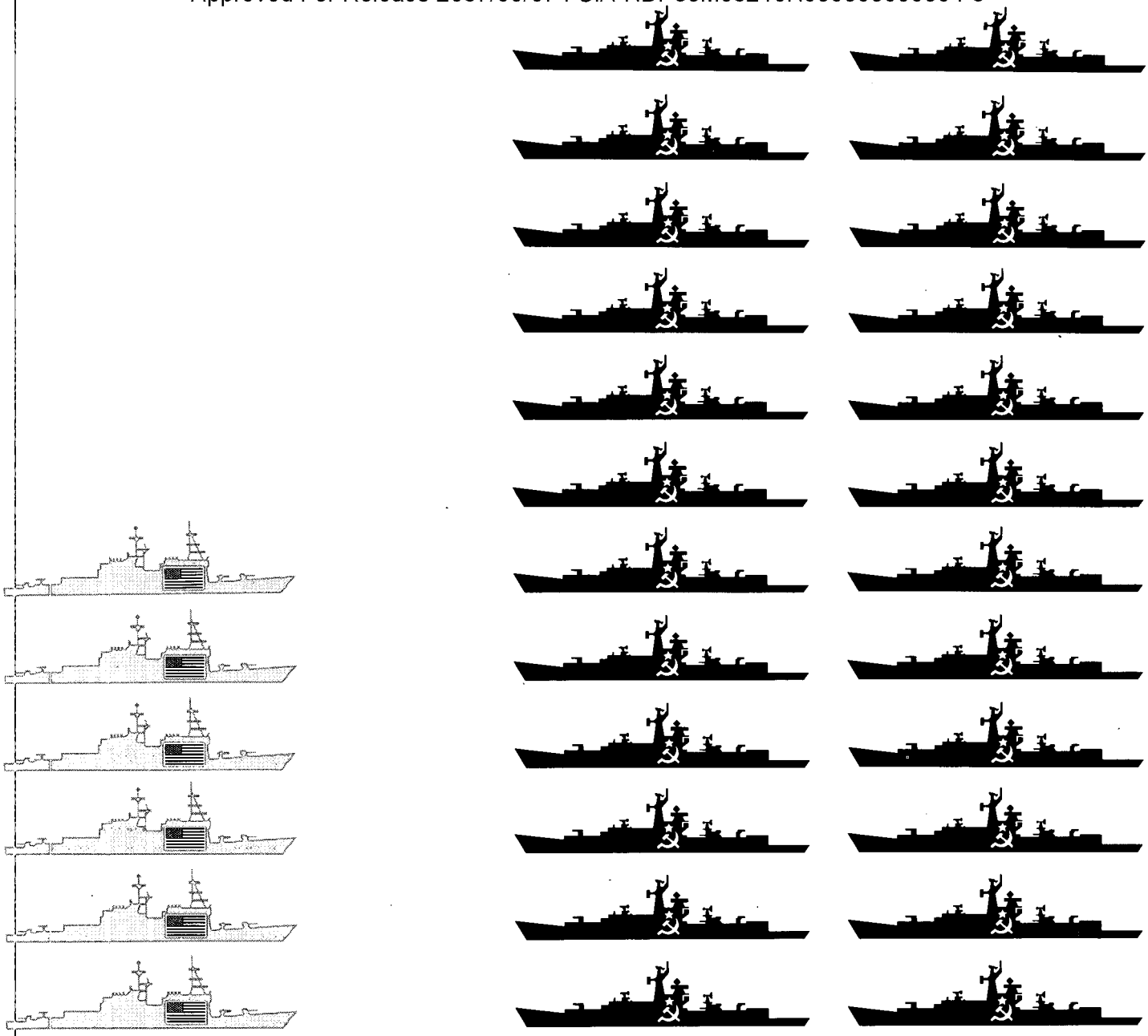
". . . At no time did I or any DoD official believe that 'political pressure' was being applied."

Thurmond had, in fact, written Secretary of the Army John O. Marsh on February 6th forwarding, in "an effort to be fair to both contractors [Norton and Brunswick]" an outline of Brunswick's position in the case. Thurmond also noted in his correspondence that he was "hopeful that the issue involved can be settled to fulfill the Defense Department's needs and at the same time be an equitable solution for both companies."

But two weeks later, Thurmond wrote Secretary Daoulas that, "I just want to reemphasize that the Norton Company proposal . . . provides a government savings of $15-million compared to the Defense plans to award portions of the contract to both Norton and Brunswick companies."

As *AFJ* went to press with this issue, the Justice Department was expected to file a motion to set aside the previous injunction which blocks the Defense Department from getting on with its business of arming the troops. ■☆■

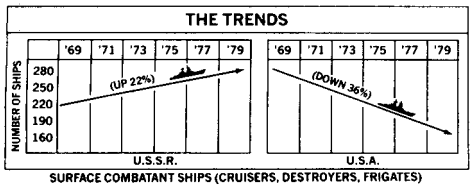
Index to Advertisers



A strong foreign policy is one thing. Keeping it afloat is another.

America is talking tougher these days. And that's fine. The whole world needs to know we won't be pushed around.

At the same time, America must be sure it can back its strong words with action. That's the problem. Our surface navy just isn't large enough to keep our interests secure everywhere. Right now the Russian surface combat fleet outnumbers ours 4 ships to 1. A gap that grows wider every year. Unless a larger shipbuilding program is approved, we may actually remove more ships from active service during the 1980's than we add—just as we did during the 1970's.



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Bath Iron Works is committed to maintaining this record. Because a strong foreign policy is viable only if it is backed by a strong navy.

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A Sea-Going M-X ICBM?

by Jerry O'Rourke

THE M-X ICBM MAY BE GOING TO SEA.

New SecDef Caspar Weinberger recently stated, "I like the idea of going to sea if you can do it."

Many others seem to like the idea as well, for a variety of reasons. Former JCS Chairman Adm. Tom Moorer boosts the idea largely on strategic grounds. Sen. John Warner, a former SecNav, is interested. His state of Virginia includes both a massive naval complex at Norfolk and a booming maritime industry in the Tidewater region. Governor Matheson of Utah, the presently planned-for home of much of M-X, has become a very reluctant host. When the Air Force proposed split-basing as a palliative, Senators John Tower of Texas and Harrison Schmitt of New Mexico, both strong M-X supporters, quickly made it clear that they shared Gov. Matheson's reluctance to host the M-X in their states. The Mormon Church also wants the M-X to go away, as do a lot of petition-signing natives of Nevada, another potential host state.

Environmental and ecological problems are at the heart of this rising voice of discontent. Few people are actually against the M-X missile, as long as it is based somewhere else. And since we all live on land, why not send the unwanted M-X to sea?

Arguments for sea-basing include:

- Better survivability of the missiles against a Soviet attack. M-Xs ashore can be targeted, albeit at the cost of a lot of Russian warheads. With hundreds of M-X-laden (and M-X-decoy-laden) merchantmen steaming around the high seas, the Russians would face an imponderable—probably impossible—targeting task. Even if they managed to establish tracks on most of the ships, the costs to them would be enormously higher than those for targeting known land sites.
- Lowered vulnerability for the US population against a Soviet attack. Presumably the USSR's initial ICBMs would go for the M-Xs. With the M-Xs in land bases, such an attack would evaporate much of Utah and Nevada and send radioactive fallout over our heavily populated East.
- Little-to-no need for a companion anti-ballistic missile defensive system for the M-X lairs.
- Little-to-no adverse environmental and ecological impact. Present M-X basing plans call for vast diversion of scarce western water resources, massive tonnages of concrete, and introduction of "civilization" on a grand scale to pristine remote areas.
- A national defense strategy more suited to "Maritime America" to offset our inherent disadvantages against a "Heartland Soviet." We have complete and easy access to oceans; they have almost none. They have countless thousands of miles of sparsely populated land mass; we have much less. They exploit their continental advantages; we should exploit our oceans, not our land.
- There would be almost no objection to seaward deployment of M-X. Land-basing is sure to involve lengthy and costly delays, in much the same pattern which befell the now moribund Navy Sanguine ELF program to bury huge radio transmission wires across the forests of the upper midwest.
- Providing the ships, shipyards and logistics support for the sea-going M-X would give a much-needed boost to our economically depressed maritime industries.

Capt. Jerry O'Rourke was a "snipe" in Boiler Room #3 of the USS Hancock *(CV-19) in WW II. Prior to retirement in 1974, he directed the Navy Fighter Study Group. He is presently a Vice President of Maritime Associates, Inc. of Burke, Virginia.*

However, opponents of M-X sea-basing are quick to point out a lot of unanswered questions. In the first place, they say, it's simply too risky to have nuclear weapons floating around in ships, subject to the vagaries of wind, weather, Russians, terrorists, and even pirates. An additional reservation, held by Mr. Weinberger among others, is that a water launch may not provide sufficient accuracy to meet M-X targeting needs. The counter argument holds that any corrections needed can easily be programmed into the missile's early flight path.

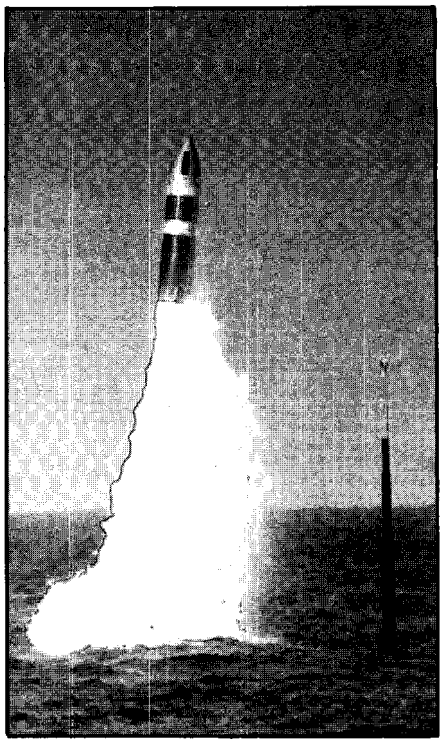
Sending the M-X to sea would destroy our long-held Triad concept. Would our strategic defensive posture then be stronger—or weaker?

What about our European allies, who have been playing host to a lot of land-based nuclear weapons for many years? Would they clamor for us to send all of these to sea as well? And would they tend to demur accepting new tactical nuclear weaponry—GLCM and Pershing II—as they come along?

How serious a disaster would it be if an M-X-laden ship ran aground, broke up in a storm, or collided with another ship at sea?

And if the ships were manned by civilian crews, with only a small detachment of military personnel, wouldn't there be an unacceptable risk of strikes and refusals-to-sail, perhaps even mutinies?

According to one expert, retired Navy Capt. John E. Draim, one question which has already been answered is Mr. Weinberger's "... if you can do it." Captain Draim headed the Navy's Project Hydra, in which a number of missiles were sea-launched in the early 60s. The missiles were designed or modified to float nose-up in the water, and simply blasted off. M-X missiles could do the same, having been put into the water from a submarine, a warship, a merchantman, even a barge, a helicopter, or an airplane. In the event of a launch failure, the missile could be destroyed by non-nuclear remote control devices. Probably the simplest and cheapest system is the "Roll, Splash, Boom!" technique. This would involve rolling the missile out of the hull of a plain merchantman, having it assume an upright flotation, and blasting it off.



Sea launch

Sending the M-X to sea would also gore a lot of bureaucratic oxen. Would the Air Force run the program or would the Navy exert its traditional maritime prerogatives? And even within the Navy, hackles could rise at the thought of possibly replacing Trident submarines with "tramp steamers."

Most observers agree that the M-X at sea warrants a lot more consideration than it has been given to date. Largely because of the traditional acceptance of the concept of a Triad for sea, land, and air-based strategic weapons, it has been assumed from the start that the M-X would be laid in and launched from concrete. The arguments in favor of more study on M-X basing hold that dropping this assumption might provide some dramatically different results.

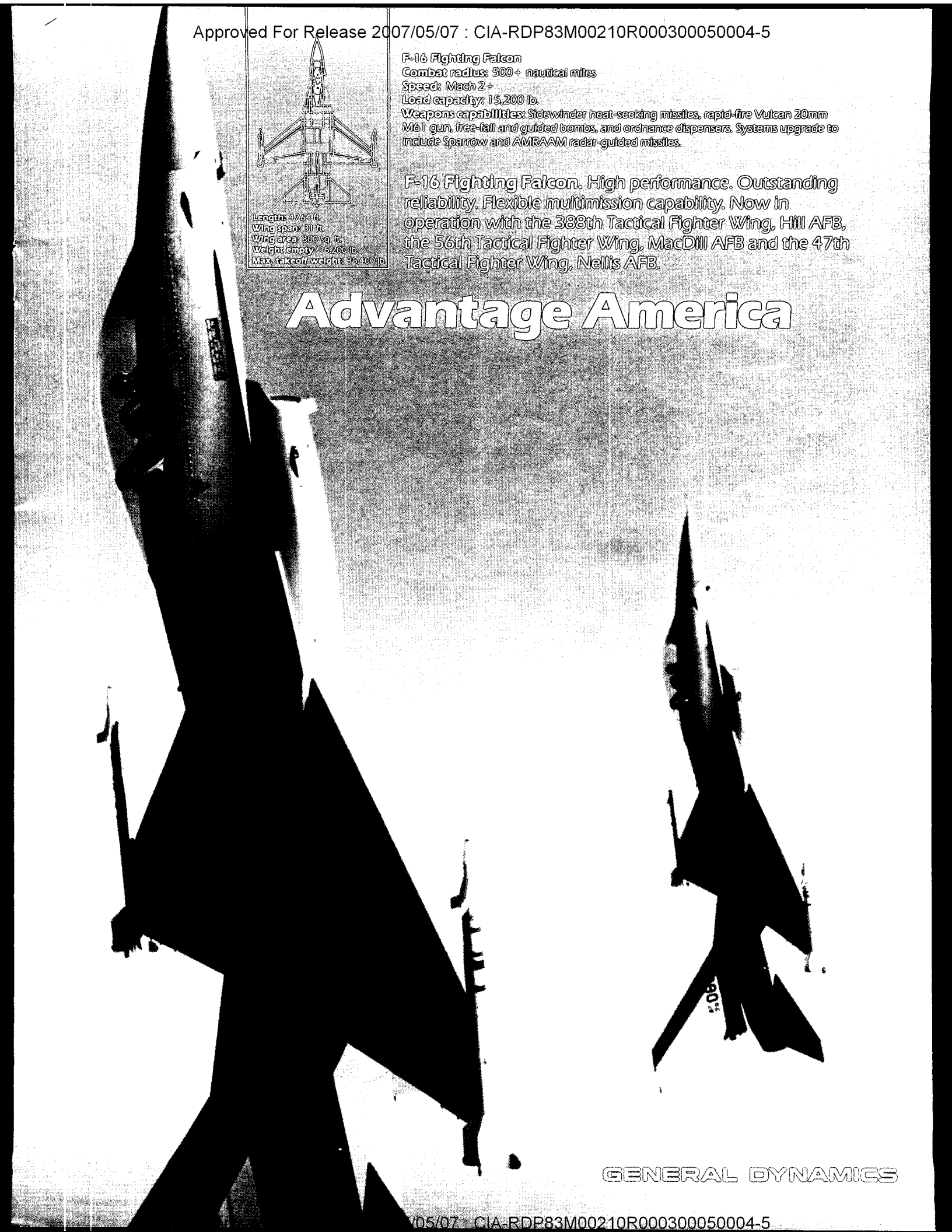
It's a good bet that the mounting wave of discontent with present M-X basing plans will force additional studies. If so, the sea-basing alternative should provide a major issue. ■☆■

Length: 47.64 ft
Wing span: 31 ft
Wing area: 300 sq. ft.
Weight empty: 15,200 lb
Max. takeoff weight: 35,400 lb

F-16 Fighting Falcon
Combat radius: 500+ nautical miles
Speed: Mach 2+
Load capacity: 15,200 lb.
Weapons capabilities: Sidewinder heat-seeking missiles, rapid-fire Vulcan 20mm M61 gun, free-fall and guided bombs, and ordnance dispensers. Systems upgrade to include Sparrow and AMRAAM radar-guided missiles.

F-16 Fighting Falcon. High performance. Outstanding reliability. Flexible multimission capability. Now in operation with the 388th Tactical Fighter Wing, Hill AFB, the 56th Tactical Fighter Wing, MacDill AFB and the 47th Tactical Fighter Wing, Nellis AFB.

Advantage America



GENERAL DYNAMICS

Army Kills "High Priority" IMAAWS

THE NATION's FUTURE RDF forces won't have to worry about transporting thousands of man-portable medium-range anti-tank missiles like today's Dragon to the Persian Gulf—or anywhere else. They won't *have* one.

A special Army review group decided on April 17th and 18th to totally cancel the next generation Dragon replacement, a controversial program called IMAAWS (Infantry Man-Portable Anti-Tank Assault Weapon System). The Army has 44,000 Dragons in inventory today, but the panel concluded there is "no requirement" for anything to replace it.

Telling that to Congress may be a bit embarrassing, however, since the Army's Chief of Staff testified on February 5th, 1980 that IMAAWS is "one of our highest priority programs." Similar endorsements have been heard on Capitol Hill from former Defense Under Secretary Dr. William J. Perry and as recently as this February from Assistant Defense Secretary Jack Borsting, the DoD Comptroller.

Last September, the Army awarded three contracts to develop IMAAWS, but canceled them less than two months later because it wanted to "re-study" the program and "make it more suitable for the soldier." The weapons which the Army had planned on developing apparently were too heavy (45-55 lbs.) to satisfy its infantry proponents (December, April *AFJ*s).

At the time of last fall's contract cancellations, an Army spokesman told *AFJ* that the Army hoped to launch a new competition for the weapon "next spring or summer." Instead, the Army has decided it doesn't need such a weapon after all.

Flawed Study?

Some Service officials tell *AFJ* they are "incredulous" over that conclusion. General Donald Starry, a tanker who commands the Army's Training and Doctrine Command (TRADOC) and whose job makes him the Army's chief "requirements" expert, told the special IMAAWS review panel on April 17th that TRADOC had reached such a conclusion based largely on a study of anti-tank weapon needs performed by his TRADOC Systems Analysis Agency. TRASANA is an in-house "think tank" at White Sands Missile Range headed by the Army's former Deputy Under Secretary for Operations Research, Dr. Wilbur Payne. TRASANA concluded that the Army's new TOW II long-range anti-tank missile and its array of M-60 and M-1 tanks (for medium-range engagements) would so deplete enemy forces that few targets (perhaps 10% of the attacking force) would be left for IMAAWS by the time the enemy closed to within its range.

But the study was badly flawed, according to many senior officers. It looked only at Army "heavy" divisions—mechanized units which have a high density of TOWs and tanks—but did not examine the so-called "light" divisions which have few such weapons and which today rely heavily upon the shorter range Dragon anti-tank missiles which IMAAWS would replace. It is the light divisions—like the 82nd Airborne, 101st Airmobile, and infantry units—which would deploy first to the Persian Gulf and have to hold there until heavier forces could be deployed by sea 10 days to three weeks after war erupts. The Soviet airborne divisions they would initially face have a far heavier density of tanks, armored fighting vehicles, and anti-tank weapons than their US counterparts (Jan. 1980 *AFJ*). Nor did the study consider US Marine Corps forces—which depend upon the Army to develop their principal weapons, which also are generally considered to be "light" divisions, and which would also be among the first US combat units to engage in combat under the new Rapid Deployment concept, or fight on NATO's flanks in the event of war in Central Europe.

One Army officer told *AFJ*, "If DoD's program analysis shop had used that superficial a study to recommend canceling a major Army program, you'd have heard the Army screaming in the Secretary of Defense's office even if you were in Ft. Benning, Georgia. We just shot ourselves in the foot with their kind of work."

Foreign Repercussions

The Army's IMAAWS cancellation comes at an awkward time for the Pentagon's new Under Secretary of Defense for Research and Engineering, Dr. Richard DeLauer, who was to be in Europe as this issue came off the press to negotiate a final Memorandum of Understanding with NATO Allies on an anti-tank "family of weapons." Under those agreements, NATO countries are supposed to develop the next generation long-range anti-tank missile to replace the current TOW or HOT missiles, which the US would then buy (or license for US production) for American forces, while the US was to develop the next medium-range anti-tank missile, to replace Dragon, which European nations would license or buy for their armies. But the Army has decided unilaterally to move ahead with TOW II, essentially a new long-range missile (new warhead, guidance system, tracking beacon, a rocket motor), and to cancel development of the medium-range missile which the US was to develop for the Alliance. ■☆■

MEMOS

THE NEWEST AIR FORCE AIR-TO-GROUND tactical missle, the GM-65D Infrared (IR) Maverick was tested recently by the Army's First Infantry Division on the plains of Fort Riley, KS. The tests were to evaluate the IR Maverick's performance in a European-like environment against battlefield targets, in both day and night conditions. The Maverick, managed by Air Force Systems Command's Aeronautical Systems Division and made by Hughes Aircraft was tested for both design and operational requirements. The Air Force Test and Evaluation Center at Kirtland AFB, NM conducted operational testing to determine how the weapon can be used to achieve tactical objectives.

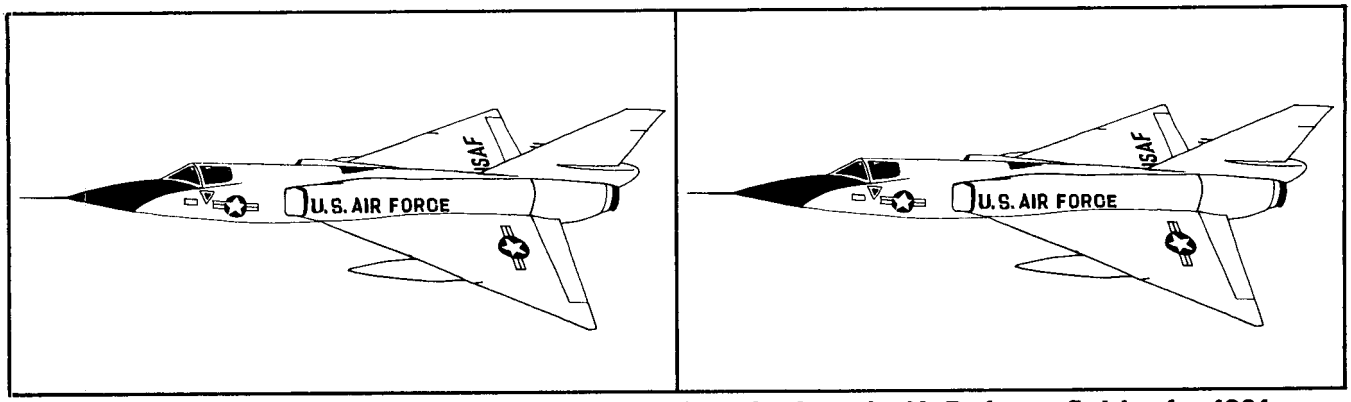
THE F/A-18 NAVY FIGHTER program will be reexamined rather than approved for production in its present fighter version—that was the decision handed down by a March 17th Defense Systems Acquisition Review Council. As noted in the latest (December, 1980) Selected Acquisition Report (SAR), the F/A-18 is the nation's costliest ($37.9-billion) weapons program, which has suffered an additional $8.8-billion increase since the September, 1980 SAR.

Due to technical difficulties with the aircraft, the Conference Committee on the FY81 Defense Appropriations added a rider to their report requiring that OSD certify that problems discovered in the Initial Operational Test and Evaluation were corrected.

In recent years, the Navy has claimed that it needs the F/A-18 because there are no suitable alternatives. However, in the past few weeks, Navy Secretary John Lehman has approved the expansion of the F-14 fighter force so that all big deck carriers have two F-14 squadrons—thereby eliminating the Navy fighter role for the F/A-18. Also, the Marine Corps is being allowed to buy the AV-8B for its light attack squadrons—eliminating a second F/A-18 role. The remaining roles are in Navy light attack and Marine Corps fighter squadrons for which other alternatives are being considered.

PORTABLE DYNAMIC SIMULATORS (PDS), a type of electronic warfare simulation system, will be shipped by Antekna, Inc., a subsidiary of Itek Corporation, to a NATO nation in Western Europe, concluding a 16-system, $5-million contract. PDS is a completely portable threat generation system which trains military personnel and tests electronic warfare operating equipment. The system realistically simulates the dense electromagnetic threat environments of modern warfare and can be set up in 30 minutes.

THE NEWEST AND LARGEST VESSEL Traffic Service (VTS) now protects 200 miles of highly active waterway in the Pacific Northwest thanks to a Coast Guard contract awarded to Eaton Corporation's AIL Division worth $9.3-million. The 1979 contract included manufacture and installation of ten radars, displays and supporting equipment. ■☆■



America's top Air Defense fighter for 1956 **America's main Air Defense fighter for 1981**

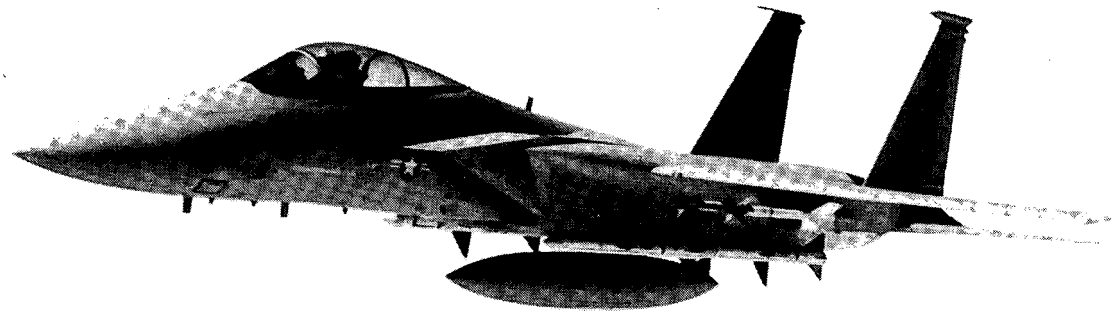
America's Air Defense is riding on a plane that's older than some pilots flying it.

It's sad but it's true. We still have to depend on a fighter from the 50's for continental defense —an aircraft that was once supreme, but now is not only range-limited, but radar-limited, armament-limited and expensive to maintain.

There is a fighter selected for USAF strategic defense that is without compromise. It can outfly, outfight, and outperform any other aircraft in the air. It can carry out continental and world-wide defense assignments—bomber threat, cruise missile penetration, line-of-communication protection and even anti-satellite.

The F-15 Eagle.

The Eagle's multi-mission avionics give unprecedented advantage in air-to-air intercept. Sidewinder missiles, Sparrow missiles, 20mm cannon, anti-satellite weaponry, and remarkable fuel capacity combine for long range and an awesome arsenal to confront any foe. The F-15 Eagle. Its very presence is evidence of national resolve.



F-15 Eagle

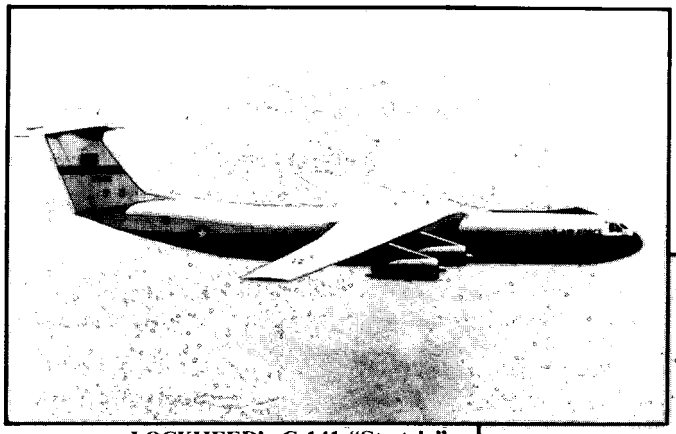
MCDONNELL DOUGLAS

New DoD Mobility Study Asks $18-$31-Billion to Beef Up Airlift, Preposition More Forces

by Deborah M. Kyle and Benjamin F. Schemmer

A CONGRESSIONALLY-MANDATED Pentagon study of US mobility capabilities and needs, sent to Congress on April 10th, makes a complex but strong and conservative case for an $18- to $31-billion, eight-year program to beef up the nation's airlift forces, and to preposition significantly more equipment for US forces in Southwest Asia.

The study was due to Congress on February 1st, but its controversial contents caused internal Pentagon "staffing" of it to drag out. At the insistence of Senate Armed Services Committee Chairman John Tower (R-TX), a 32-page, classified executive summary of the study was finally delivered to his committee and its House counterpart on April 10th. Because Pentagon proponents of such mobility alternatives as airlift, sealift, prepositioning, and amphibious assault lift were still trying to "coordinate" their various positions on the study's contents and recommendations, Deputy Defense Secretary Frank C. Carlucci had to intervene on April 6th, after a telephone call from Tower, to get a study summary sent to the Hill.



LOCKHEED's C-141 "Stretch."

Uncertainties evident in the $18- to $31-billion range of cost estimates reflect the lowest and highest cost estimates, respectively, for a program that would add the following mobility programs to the force presently programmed for 1986:

Program Goals

- **Airlift:** About $15-billion would be spent to buy and operate an additional 20 million ton-miles per day of outsize cargo capability, equivalent to buying an additional 88 operating C-5As through some combination of Civil Reserve Air Fleet (CRAF) enhancement, new C-Xs, or derivatives of off-the-shelf aircraft.
- **Sealift:** About $2.8-billion to buy and operate additional roll-on, roll-off fast cargo ships to lift an additional 100,000 tons of cargo, equivalent to another 12 *Maine*-class RO-RO ships (see photo, page 38).
- **Prepositioning:** Between $5- and $8-billion for up to 130,000 tons of equipment prepositioned somewhere in Southwest Asia plus Maritime Prepositioning Shipping to deploy a third Marine brigade-size amphibious task force in the area, while also beefing up the Army's prepositioned stocks in Europe or improving host nation support there to improve the US' rapid reinforcement program.

Airlift Alternatives

The study made no specific recommendations as to what kind of a new C-X outsize cargo transport to buy, or whether to buy it compared with putting the present C-5A back into production, or whether to help achieve the additional 20 million ton-miles per day outsize cargo capability by beefing up the nation's CRAF, or by buying additional cargo transports like the KC-10.

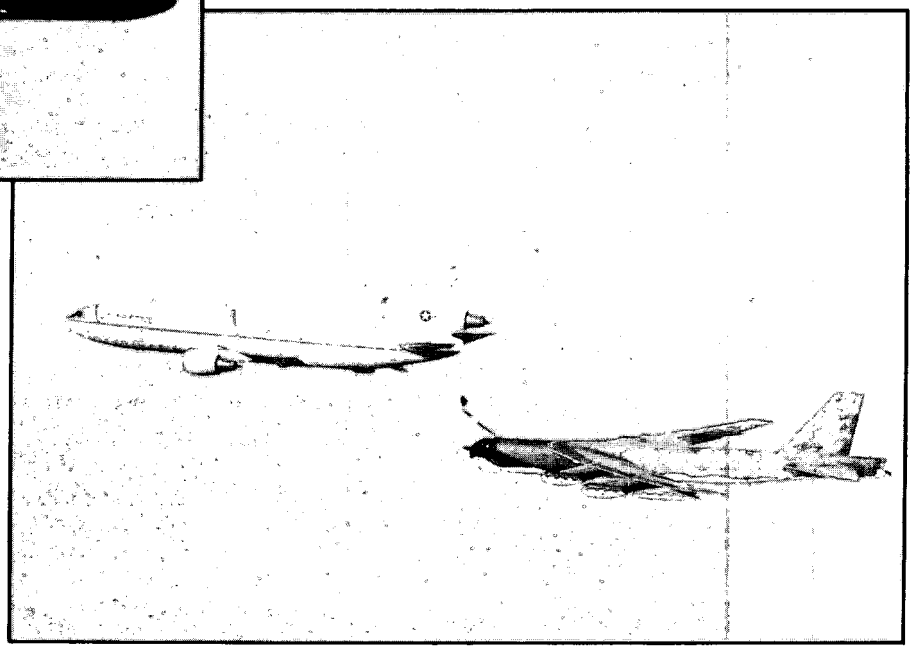
It estimated costs for a new C-X fleet to provide the additional 20 MTM/D lift at between $500-million and $1.3-billion to research and develop a new austere airfield capable plane (depending upon whether a new plane or derivative is developed), and at roughly $11-billion to procure them.

The Air Force hopes to select a C-X contractor this June, if a new transport plane is decided upon. Bids for the new C-X were received from Boeing, Lockheed, and McDonnell Douglas on January 26th, and the same firms responded on February 11th to a separate Air Force Request For Proposal for alternative ways to beef up its airlift capability using derivatives of existing commerical wide-bodied jets. A Defense Department decision is expected in July on whether or not to move into full-scale engineering development with the C-X and/or which commercial derivatives to pursue.

Congressional Reservations

The Fiscal Year 1981 Congressional Authorization Act expressed strong Congressional reservations over the C-X program and required that prior to award of any C-X contract, the Secretary of Defense must certify that:

1. Additional US military airlift requirements merit initiating such a program;
2. The magnitude and nature of cargo to be carried are sufficiently well defined to identify a deficiency in present military airlift capability;
3. The magnitude and characteristics of the lift requirements are well enough defined to provide clear justification for and the design parameters of such a new plane; and that
4. Plans for developing it are well enough defined to make its engineering development both economically and technically



McDONNELL DOUGLAS' KC-10 Advanced Tanker/Cargo Aircraft refuels a B-52 in flight.

Introducing the Rockwell International entry for VTXTS: Ready to go Navy. Now!

Realistically, 10 highly expensive years will be required for the United States Navy to implement a brand-new system for its VTXTS jet pilot training program. However, this problem can be overcome.

Rockwell International's VTXTS all-through jet training system is designed to make maximum use of existing Navy assets and save many years of costly development. Rockwell's study results show that this low-risk program can be obtained at a fraction of the cost of a new, and as yet, untried system.

Rockwell's entry for the VTXTS centers on the use of modernized T-2 Buckeye jet trainers and their companion 2F-101 Link simulators. The T-2 is the safest jet trainer the Navy has ever flown. It has over one hundred thousand successful carrier landings to its credit, and is being used as an advanced trainer by foreign air forces.

But there's more to the Rockwell VTXTS* than aircraft and simulators. Our computer-based academics and training management system both use equipment presently in the Navy inventory, thus greatly reducing logistics support costs.

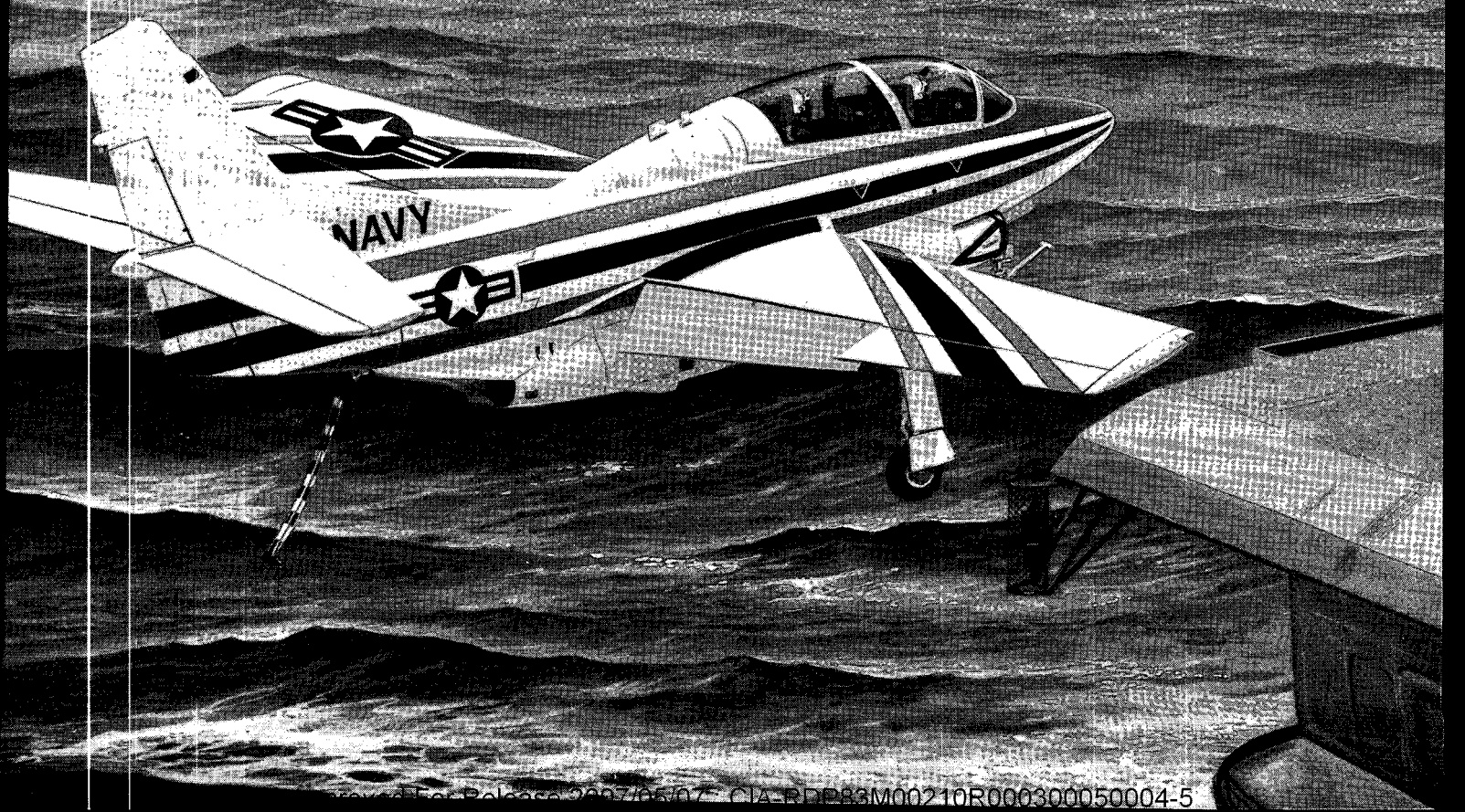
It's not necessary to wait 10 years to increase training effectiveness and greatly reduce training costs. Go with the Rockwell VTXTS program. It's truly affordable and it's ready to go Navy. Now! For further information write: North American Aircraft Division, Rockwell International, Box 1259, 4300 East Fifth Avenue, Columbus, Ohio 43216.

**Rockwell International's VTXTS entry was made possible by the efforts of Courseware Inc., DATA-DESIGN Laboratories, Singer-Link and General Electric.*

Rockwell International

...where science gets down to business

Can you afford to wait 10 years?



feasible.

Deputy Defense Secretary Frank Carlucci wrote to Sen. William S. Cohen, Chairman of the Senate's Subcommittee on Seapower and Force Projection, on April 8th to tell him that a DoD "Mission Elements Need Statement" for the C-X approved on November 28th satisfied the first certification requirement; that the completed study, "Congressionally Mandated Mobility Study," would satisfy the second and third ones; and that DoD's July review of program alternatives would satisfy the last certification requirement. In the meantime, Carlucci said, the draft executive summary of the mobility study should provide ample information to let Congress decide on the Pentagon's FY 81/82 $287-million budget requests to begin developing the plane. It would not become operational until about 1987.

But C-X doubters in Congress made clear, after reviewing the executive summary, that they still have strong reservations about the program. A Senate Armed Services Subcommittee voted on April 21st not to include any C-X money in its mark-up of the Pentagon's proposed FY82 procurement authorization bill.

The study examined lift requirements of four contingencies in detail: two in Southwest Asia, one in NATO and one in Southwest Asia which involved a concurrent, precautionary reinforcement of NATO. The study was probably conservative in estimating lift needs for those contingencies because it assumed in all cases that:

- Adequate fuel would be available at all enroute bases;
- Reception ports and airfields were adequate to process all personnel and cargo moved to the theater; and that
- Enroute basing and overflight rights were granted by all allied and normally friendly countries.

Lift Shortfalls

Current mobility forces were not able to meet the lift requirements of any of the scenarios. Even with the mobility enhancements presently programmed to become operational by 1986 (C-5 wing beef up, C-141 "stretch" with in-flight refueling, three more division equipment sets to be prepositioned for NATO, increased spares and crews to boost utilization rates, and with a CRAF enhancement expected to total about 32 747-equivalents), the shortfall was still "significant."

While the exact numbers remain classified, in general the study showed that today's mobility forces will meet only one-third to one-fifth of the lift needed in the first 15 days of such contingencies. (The 15-day period is significant because that is about the first time sealift begins delivering large quantities of equipment.) At the 30-day point, present mobility forces can meet between one-fourth to one-half of the lift needs, depending upon the scenario. Forces now programmed to be operational by 1986 will meet only a third to one-half of the lift needs by D+15, but half to all of them by D+30, depending again upon scenario.

About one-fifth of all the materiel needed to be moved by D+15 in three of the four scenarios studied represented outsize cargo.

The dynamics of the mobility problem are complex, the study makes evident. As Military Airlift Commander-in-Chief General Robert E. Huyser recently noted, airlift requirements will change dramatically between now and 1986, if for no other reason, simply because each Army mechanized division will increase in total weight by 20%, with more than a 60% increase in its "outsize" equipment. ("Outsize" means equipment that is too large to fit in MAC's C-130s, C-141s, and Civil Reserve Air Fleet aircraft. The increase in such equipment is developing because the Army is "heavying up" its divisions to give them more tanks, fighting vehicles, and artillery.)

Thus, the study confirmed what Pentagon planners have long known and tried to persuade Congress of: the nation needs *fast* lift the most, augmented by more sealift and prepositioned equipment closer to possible trouble spots in the Persian Gulf. Fast lift means airlift.

In the 1973 Arab-Israeli War, Huyser notes, 17 days elapsed before the first American ship delivered any supplies to Israel; airlift began delivering them within hours after hostility commenced.

Payoff

The mobility enhancement program which DoD's latest study proposes is expensive, but its payoff is immense. For one of the scenarios, war games suggest that the US' failure to deploy a small multi-division force within 25 days might require a force almost four times bigger to dislodge enemy forces at a later time. In another scenario, a force six times larger would be required, one far beyond the US' peacetime force structure. Thus, the study concludes, "Programs that reduce early shortfalls are more valuable than those that make somewhat larger reductions at a later date."

Sealift, Prepositioning Alternatives

Very fast ships such as the Navy/Rohr 3,000-ton, 65-knot Surface Effect Ship (SES), were considered, as well as dedicated conventional roll-on/roll-off ships and dedicated fast roll-on/roll-off ships. But since a surface effect type vessel could not become operational in quantity until the early 1990s, while the mobility shortfall is a "today" problem, most of the sealift focus was on more conventional maritime lift.

(What the study called "some technical risk" in the surface effect ship showed up in its cost uncertainties: roughly half a billion dollars to develop it, but between "$3.5–$9.9-billion" to procure enough of them to move 100,000 tons. That made the SES alternative 4½ to 6½ times more costly to procure than either a fast or

MAC's One-Man Airlift to Save a Life in Russia

by Deborah G. Meyer

ON OCTOBER 23, 1973, a small group of American medical personnel were called upon to make an unprecedented journey into the Soviet Union to evacuate a gravely ill American who was bleeding internally from a torn esophagus, and who was not responding to Soviet medical treatment. It was a tense period between the US and the USSR —the Russians were threatening to send 40,000 troops into the Middle East, and President Richard Nixon was about to call a worldwide military alert.

Col. Donald Eggerman, then a major and copilot on the historic Military Airlift Command C-141 flight, told *AFJ* that he received word at Rhein Main AFB in West Germany on the afternoon of the 22nd that his aircrew was about to become the first ever to fly a US military aircraft across all of Russia. It took "eight to 10 hours before all of the diplomatic angles were worked out," Eggerman remembers. The US crew dressed in civilian clothing, and all numbers and insignia were painted over with the exception of one small American flag on the tail. The team left a little after midnight for their first stop—Moscow.

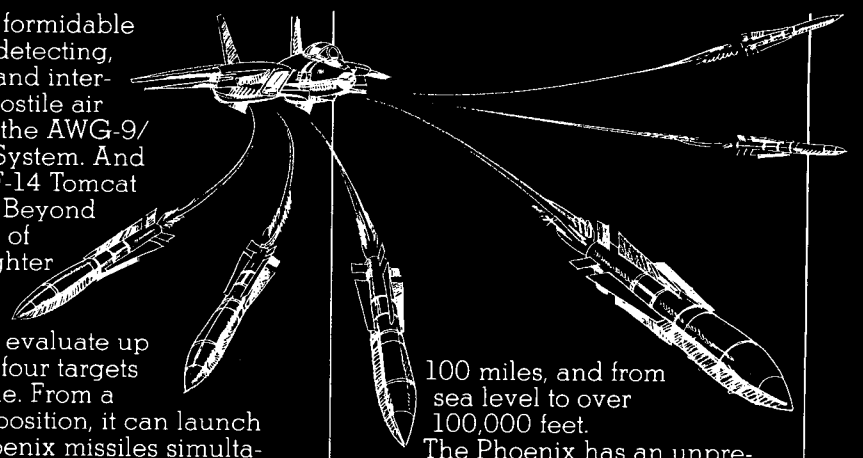
In Moscow, Eggerman recalls, they picked up an English-speaking Soviet navigator who traveled with them across the USSR. The plane was in constant radar contact with each Russian observation post, with each being notified of the plane's flyover time. All of the towers were manned by English-speaking controllers.

They arrived in Irkutsk, Siberia early the next morning to pick up James Torrence, the member of a US cultural exchange group, who was so ill. According to Col. Eggerman, "I wouldn't have given a nickel for his chances" as they loaded him on the plane. Once on board, blood transfusions were started immediately—the patient had been rejecting the Russian blood and it was now necessary to get American blood into him immediately. The C-141 is a general transport—not a medical one—and the sick man was strapped into a hammock, receiving his transfusions by flashlight. Surprisingly, he began showing progress immediately.

From there, said Eggerman, the group traveled to Khabarovsk, where they parted company with the Russian navigator and refueled the plane. They left within 20 minutes for the last leg of the journey to Yokota AFB, Japan.

It was a mission the State Department called a "historic first." Never before had any American plane flown over the entire Soviet Union, much less a military one. ■☆■

THE F-14/PHOENIX TEAM. BECAUSE YOU HAVE TO GET THE ENEMY BEFORE HE GETS YOU.



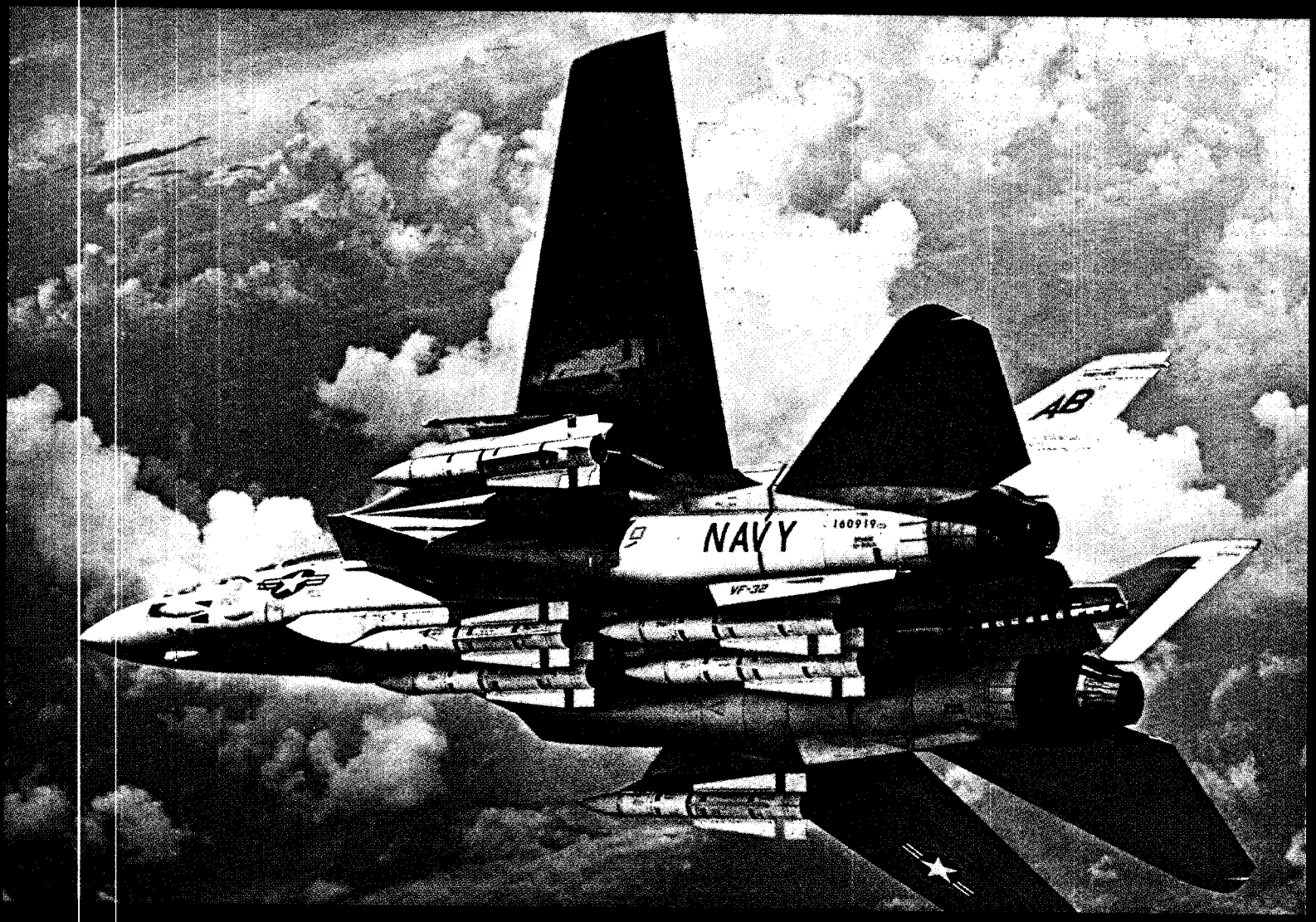
The most formidable force for detecting, tracking and intercepting hostile air threats is the AWG-9/Phoenix System. And only the F-14 Tomcat carries it. Beyond the range of enemy fighter radar, the F-14 can track and evaluate up to twenty-four targets at one time. From a stand-off position, it can launch its six Phoenix missiles simultaneously against the greatest threats and still monitor eighteen additional targets.

The missiles—with their supersonic speed, 25-g turn capability, terminal radar homing guidance and ECM resistance—allow one F-14 to defeat a half-dozen of the enemy's best. At distances of over 100 miles, and from sea level to over 100,000 feet.

The Phoenix has an unprecedented 84% kill rate against simulated supersonic bombers, fighters and cruise missiles.

Which means an all-Tomcat fighter force will give U.S. carriers the greatest air defense capability in existence.

Grumman Aerospace Corp., Bethpage, N.Y. 11714.



THE PAYOFF IS PERFORMANCE. GRUMMAN

C-X Designs Vary Widely

INDUSTRY'S C-X DESIGNS vary widely in technical approach, *AFJ* has learned from sources close to the selection process.

Boeing has relied heavily on the advanced technology tested successfully in its YC-14 Advanced Medium STOL Transport, and the planes are not dissimilar in rough appearance, with two of the engines mounted above the wings (as with the YC-14) and the third engine mounted in the tail. Thus, the plane's cruise and short-field performance are enhanced by the use of some "upper surface blowing" to add lift and reduce fuel consumption, landing speeds, and take-off/landing distances. The engines are currently certified General Electric CF-6-80As, which will also power Boeing's new 767 commercial transport. Each engine has about 48,000 lbs. of thrust.

Lockheed and McDonnell Douglas both proposed more conventional designs, four-engine transports using existing Pratt & Whitney JT-10 engines at about 32,000 lbs. of thrust each. An improved version of that engine will be used in Boeing's new 757 commercial jetliner. McDonnell Douglas' C-X relies heavily on the short-field technology demonstrated in its YC-15 AMST prototype. Lockheed's might be said to represent a scaled-down C-5A. ■☆■

conventional RO/RO fleet moving the same tonnage, and three to six times more expensive in 20-year life cycle costs. The study noted, however, that the SES concept "showed high productivity values;" given the study's "here and now" problem, their potential long-term payoff was not analyzed.)

Although it used existing USMC amphibious lift forces, the study did not consider buying more amphibious assault shipping. The executive summary does not explain why.

Land-based prepositioning was estimated to be "significantly less expensive than maritime-based" depots (such as the one now at Diego Garcia for a brigade-size Marine amphibious force), but, the study cautioned, "we do not always have that option ... and cannot be sure how we can develop it" in Southwest Asia. Maritime prepositioning costed out at about twice that of land-based options.

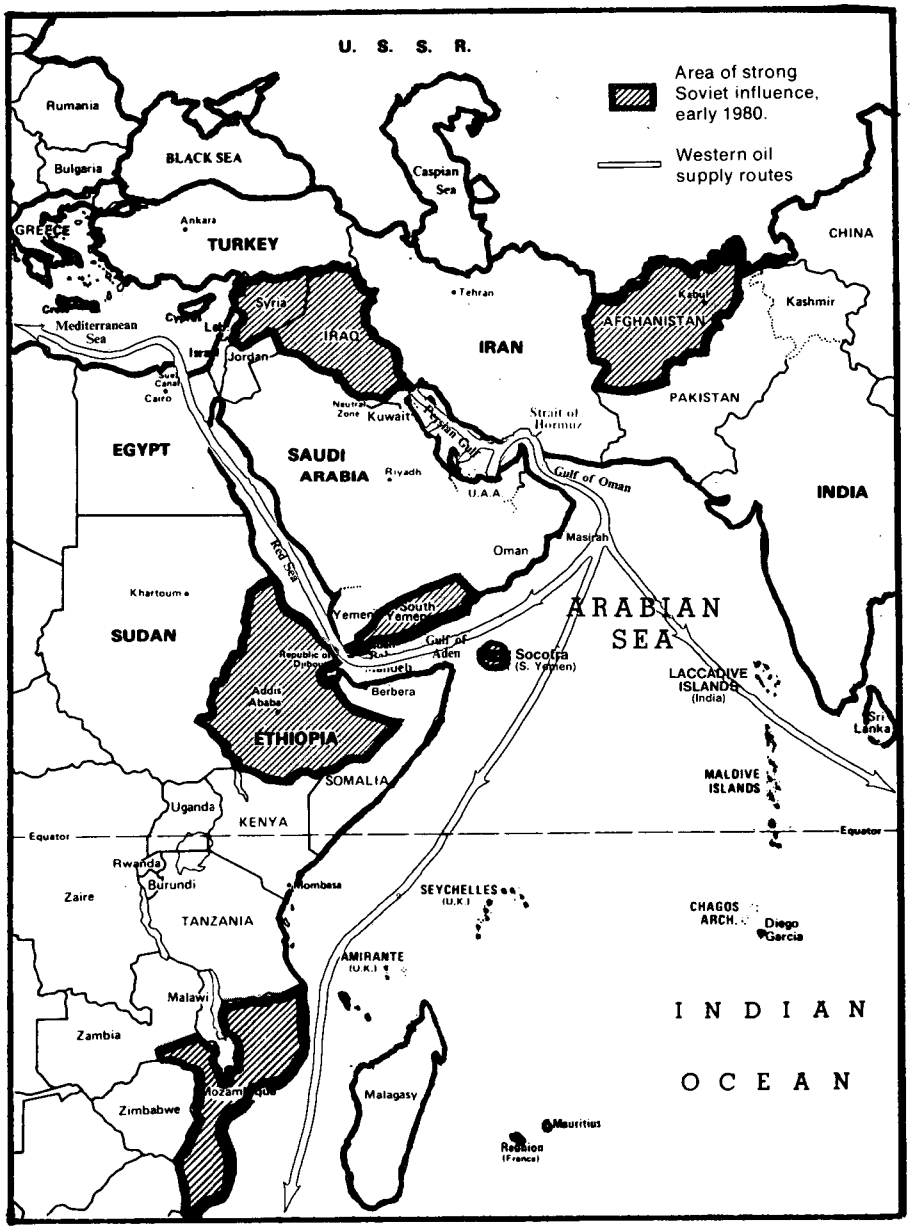
It said that in-flight refueling reduced cycle time and increased airlift productivity by 3-5%, but did not recommend buying additional tankers "because this improvement is so small."

C-X Implications

Although the study summary does not say so, providing the additional 20 million ton-miles per day of airlift would require buying between 180 and 200 new C-X aircraft. Scenarios given to the three contractors bidding on the program were significantly more demanding. To meet them would require between 200 and 240 new C-Xs, or some 100 to 120 more C-5As. The study found that "direct delivery of materiel to forward airfields" showed a 7% to 15% productivity advantage, making up the time otherwise required to close that materiel between a port and the forward airfield, plus the transhipment time avoided by not transiting through the port. For the 20 million ton-mile per day airlift addition which the study recommended, the austere forward airfield capability was estimated to cost about 28% more in aircraft procurement costs, but only about 5% to 15% more in 20-year life cycle cost.

The industry proposals for C-X now being evaluated should provide a more refined cost estimate of the austere field vs. "main runway" capability. MAC's Huyser told the House Armed Services Research and Development Subcommittee last month, "Last year I was criticized for not being able to give a clear description of the aircraft to fill the C-X role. I still can't, but I firmly believe the Air Force used the proper approach which was —define the requirement and let the experts, the aircraft manufacturers, design an aircraft best suited to do the job." About the most specific thing Huyser has said publicly of the proposed plane's characteristics is that it would have a payload of "at least 130,000 pounds" and thus be "able to transport the ... Army's XM-

The Indian Ocean and Persian Gulf: Western Oil Supply Routes and Areas of Soviet Influence



Source: "The Rapid Deployment Force and US Military Intervention in the Persian Gulf," by Jeffrey Record, Institute for Foreign Policy Analysis, Inc., Feb. 1981.

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Bell's Modernized AH-1S: We're giving the best we've got... the best we've got.

Throughout the world, Bell's AH-1S Cobra supports the teams that support defense. Active Army and Army National Guard units fly, fire and maintain this combat-proven craft. But today, there's a new Cobra.

Representing the only dedicated attack helicopter in free world production, the Modernized Cobra is in service now. Well-suited to engage a variety of targets on the modern battlefield, this Cobra is designed to defend the future. The relative small size and ease of handling of the AH-1S contribute to the agility needed for terrain flight. Ballistic tolerance of components, coupled with the latest survivability features, protect the aircraft and crew against numerous threat systems.

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The Bell AH-1S Cobra, it's designed for tomorrow's defense. The ultimate in advanced technology for attack helicopters will serve in the units/organizations represented by these patches. It *could* do it today.

For additional information on Bell's Modernized AH-1S contact: Vice President, U.S. Government Marketing, Bell Helicopter Textron, P.O. Box 482, Ft. Worth, Texas 76101.

Bell's AH-1S Cobra: everything's new but the name!

Programmed US 1986 Mobility Forces

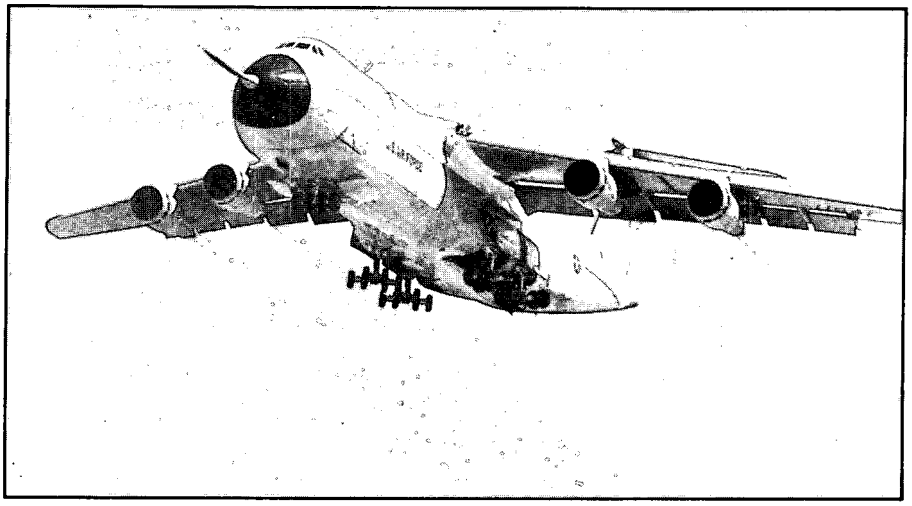
Military Airlift:	**70 operating C-5s** **234 operating C-141s**
Civil Reserve Air Fleet:	**32 747-equivalents**
Prepositioned Equipment:	
Europe	**6 Army division sets** **2 USMC brigade amphibious task forces**
Persian Gulf	**2 USMC brigade amphibious task forces aboard Near Term-Prepositioning Ships and TAK-X Maritime Prepositioning Ships**
Fast Sealift:	**8 Modified SL-7s**

RDF's KELLEY: "No responsible person could logically call the Rapid Deployment Joint Task Force a 'paper tiger.' ... Parenthetically, I must be the first to emphasize that without sufficient strategic airlift, strategic sealift, and amphibious lift, there is no way to put a capital 'R' in 'Rapid'."

l tank;" that with 100,000 pounds of cargo it would have an "unrefueled range of more than 3,000 nautical miles;" and that it could use "short, semiprepared runways."

Huyser told Congress in April that because of spare parts underfunding in previous years, MAC's C-5 and C-141 fleets today could meet "only 62% of the surge sortie flying hour objective and 52% of the sustained flying hour objective established by the Secretary of Defense in his 'Consolidated Guidance'." Because of current long lead times for many aerospace products, Huyser said it would be late Fiscal Year 1985 before the spares shortfall can be fully corrected.

The C-5A wing modification program (which will add an additional 30,000 flying hours to the plane's useful life), he said, is now "several months ahead of schedule. The wing fix is "an expensive program," he acknowledged, but he asked, "Where else could we get 77 aircraft with that capability for $20-million per copy?" Nearly half of the C-141 fleet, Huyser added, has now been modified to the "stretch" version with in-flight refueling. The program, he said, "is ahead of schedule, below its projected cost, and will be complete by July, 1981." ■☆■



LOCKHEED's C-5A.

MAC's HUYSER: "The best fighting forces our nation can provide will be absolutely useless if they can't be rapidly deployed when needed, and supported for employment."

Congressional Questions

ENORMITY OF THE PERSIAN GULF airlift problem is evident in some quick calculations a few Members of Congress have made from the executive summary of the "Congressionally Mandated Mobility Study" sent them on April 10th.

To meet one of the scenarios postulated, *AFJ* is told, would require an airlift effort from the US five times more intense than the biggest ever mounted, the Berlin airlift. One plane would be landing somewhere in Southwest Asia about once every 20 minutes for 20 to 25 days. (That's about the same sortie or interval rate of the Berlin airlift at its peak, flown mostly by C-54s, but five times as much cargo would be carried per aircraft and for far greater distances.)

Another calculation shows that the forces which DoD projects moving to the Gulf in one scenario would form a bumper-to-bumper, two-lane convoy 60 miles long—just for the vehicles involved, not including any palletized cargo.

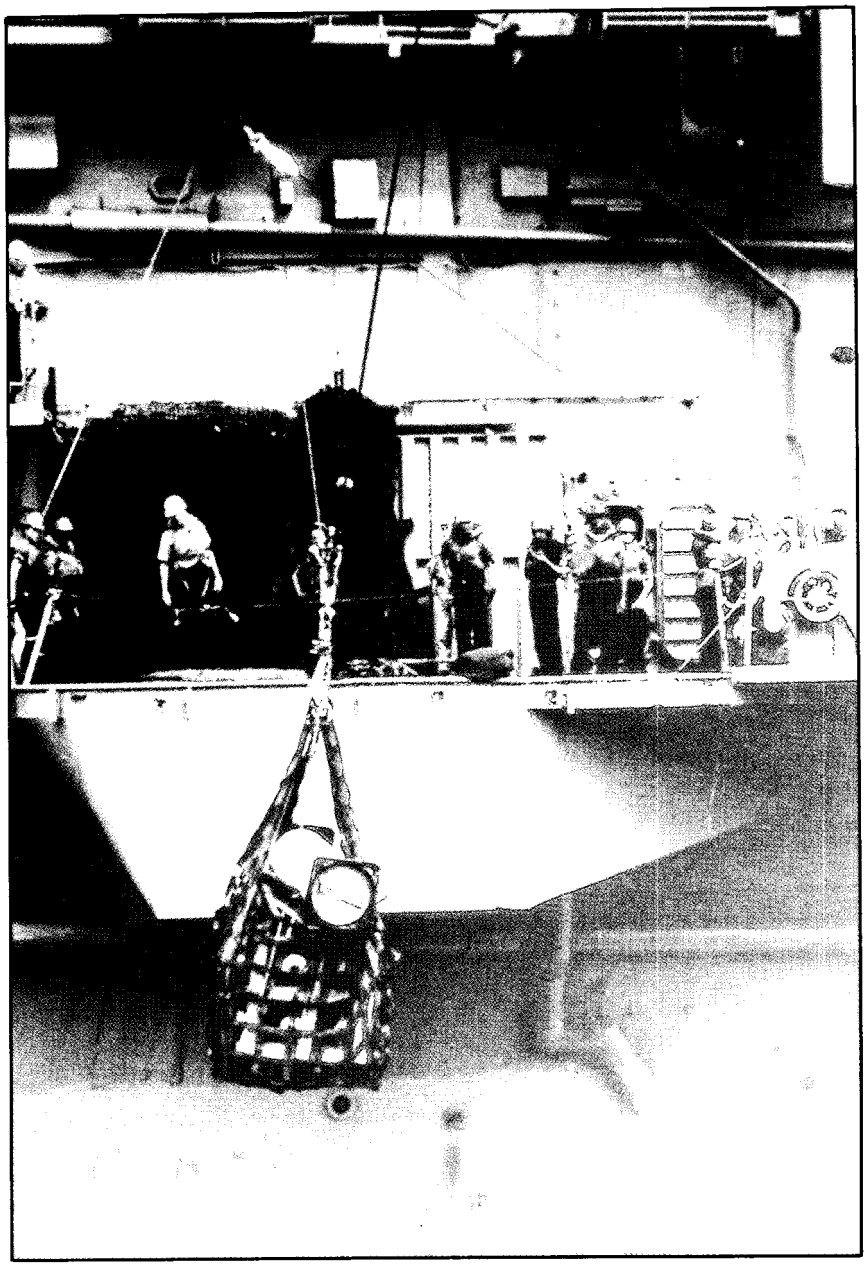
(Russia's airlift fleet might also be strained should Moscow decide to intervene in the Gulf, but its forces are far closer. It is roughly 1,500 miles from Moscow to the Gulf oil fields, but 6,500 or more miles by the shortest route from the United States.)

Congressional sources ask: "Can the Air Force manage that tempo of operations?" and, "Is it good strategy?" They also express concern over a huge USAF funding hump and strain on the military industrial base if the Reagan Administration pursues three major, concurrent new Air Force programs at once: the M-X missile; a new bomber in the LRCA (Long-Range Combat Aircraft); and C-X. ■☆■

US Sealift: Dwindling Resources vs. Rising Need?

by Deborah M. Kyle

IN MID-MARCH, CNO Admiral Thomas B. Hayward warned members of the House Armed Services' Procurement and Nuclear Systems Subcommittee that, "Without adequate and reliable sealift, literally none of our military plans is executable." Hayward went on to tell the Subcommittee that sealift initiatives in the Reagan defense budget addressed a "serious shortfall in US strategic mobility." But the initiatives the CNO referred to only begin to meet today's US sealift needs.



(US Navy Photo.)

According to a report recently published by the Military Sealift Command (MSC), the Navy-sponsored management agency charged with assuring adequate military wartime sealift, MSC cannot be expected to "meet wartime needs for sealift simply because it provides worldwide and efficient peacetime ocean transportation for military service."

Today, MSC estimates that 95% or more of the supplies needed to sustain US troops deployed under emergency conditions would be transported by sea under MSC command authority.

Vice Admiral Kent J. Carroll, Director of Logistics for the Joint Chiefs of Staff, told the House Armed Services Committee in March that, "Given that one dry cargo ship can deliver the equivalent tonnage of two and one-half days of airlift, when the first 10 ships arrive in the Persian Gulf, they deliver tonnage approximately equivalent to a full month of airlift." The actual projected sealift requirements are classified, but by MSC and Maritime Administration accounts, adequate resources to provide emergency sealift do not exist.

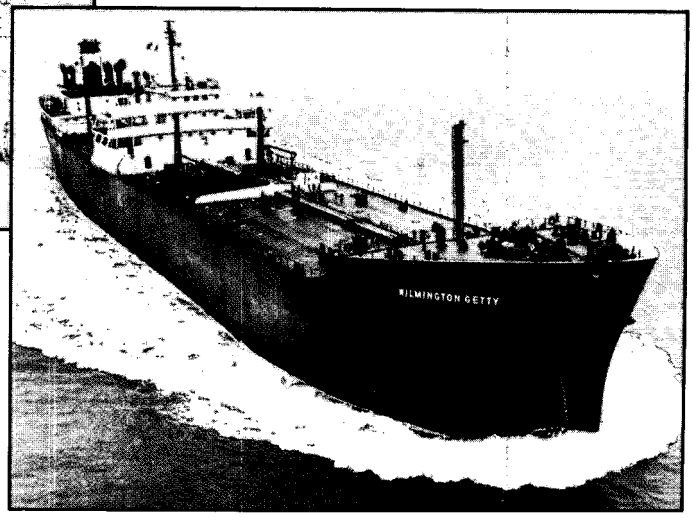
Established in 1949, MSC is authorized to augment its control fleet from the US Merchant Marine, foreign flag shipping, the National Defense Reserve Fleet and its quickly deployable Ready Reserve Force, as well as the Sealift Readiness Program and Voluntary Tanker Agreement. However, the total number of ships available to carry on emergency sealift operations is low, and the Maritime Administration projects that at the present operating tempo, nearly "the entire American fleet is needed to meet military needs in major conventional war."

Today's Merchant Marine is much smaller than it was during WWII, with more than 95% of the US international trade conducted by US-owned vessels operating under foreign flags. (History shows that traditionally, the Merchant Marine is built up when national security is threatened, and declines in periods between major conflicts.)

The number of privately-owned US merchant vessels dropped by one, from 725 to 724 between January, 1980 and January, 1981. However, carrying capacity increased by one million dead weight tons, indicating that today's ships are larger. But while one ship may carry more cargo, in emergency military sealift operations, destruction of that ship would result in the loss of greater quantities of military cargo. And, MSC notes, "Wartime losses would quickly and probably dramatically reduce the Merchant Marine's capability to support military services."

Although US-owned vessels are subject to US military emergency requisitioning codes, whether or not foreign nations would make those ships available to the US in a crisis situation is an unknown variable in defense sealift planning. While the US is presently on good terms with most nations under whose flags US-owned commercial ships sail, the fact that US sealift strength remains dependent on fragile diplomatic

CREWMEN OF THE USS *TALUGA* conduct the underway replenishment of an attack aircraft carrier. According to the Military Sealift Command, US naval forces often use commercial tankers for non-emergency refueling, most recently for sustained naval operations in the Persian Gulf. Below, the Wilmington Getty, one of the commercial tankers available for military use. (US Navy Photos.)



relations stresses US defense capabilities.

Sealift at the Mercy of Diplomatic Ties?

According to MSC, in 1950 more than 42% of all US trade was carried by the US flag fleet. A decade later, the US merchant fleet's share of US trade had dropped to 31% and in 1980, less than 5% of US trade was carried by ships flying US colors.

Thus, the US has become a nation dependent on "foreign" sealift which presents a strategic nightmare should foreign or US-owned ships flying under foreign flags carrying precious US materials be needed elsewhere. Less than 1% of the strategic mineral and dry bulk items needed to maintain the US economy and sustain military Service needs are now delivered in US flag ships. And, US energy imports are just as dependent on foreign transport—only 3% of US oil imports are now carried to US refineries on US flag tankers.

Hayward charged in March that like military sealift, the Merchant Marine has been a victim of "protracted neglect." And, he cautioned, "Its health and vitality should be of keen concern to anyone interested in the state of our national defense.

"I strongly support the revitalization and expansion of the US flag fleet."

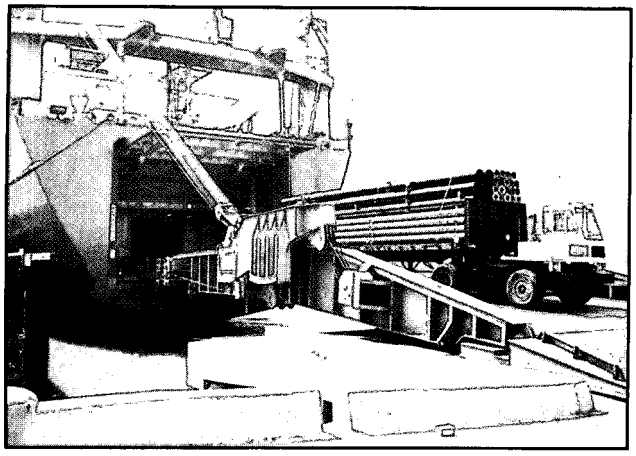
Despite Hayward's support, one Maritime Administration spokesman told *AFJ* that government subsidies used to promote private shipping construction in line with military needs have fallen victim to OMB's recent massive, government-wide subsidy cutbacks. When asked what the Maritime Administration has done to fight those cuts, the official noted that nothing had been done because the Maritime Administration had no point of contact to appeal to—the Reagan Administration had not appointed the person responsible for such appeals. So by April, 1981, the Maritime Administration had spent its FY81 construction subsidy limit—$1-million; 50% below its usual yearly budget.

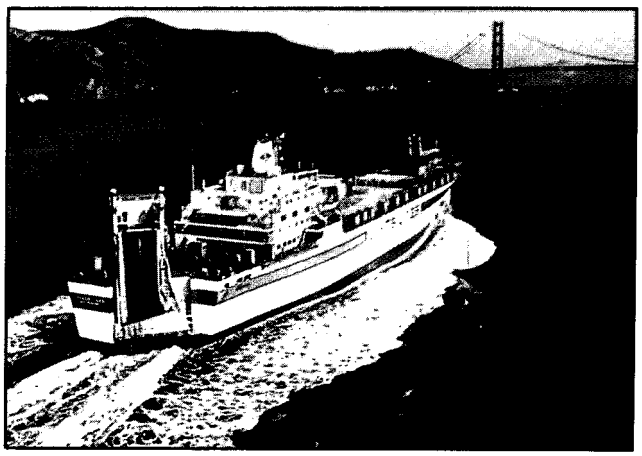
Soviet Build-Up

While US sealift capability has been eroding, the Soviets have been consistently developing a merchant fleet with dual military capability.

According to Hayward, "The Russians added approximately 30 modern units to their merchant marine—a highly militarized auxiliary of the Navy, whose ships are carefully designed for ready conversion to military roles in war, and are largely manned by naval reservists in peace to facilitate rapid transition to Navy control." All totaled, MSC estimates that the Russians have 2,475 merchant ships in their inventory while the US count is 879 (including government- and privately-owned commercial vessels). However, the Maritime Administration notes that 46 US merchant ships are presently under construction, and five additional vessels are

RECENT PLANS HAVE BEEN MADE for conversion of container ships to roll-on/roll-off configurations (Ro-Ros) more compatible with military needs. The Military Sealift Command procured two modern Ro-Ros in FY80 for near-term prepositioning assignments in the Middle East. (Military Sealift Command Photo.)





undergoing conversion in 1981.

US Sealift Resources

Of the 724 ships in the US Merchant Marine inventory, only 579 are ocean-going ships available for sealift operations. Among these are jumbo tankers and non-self-sustaining container ships which are of limited military use.

To augment its nucleus fleet in emergency situations, MSC has several options:

- **National Defense Reserve Fleet** (NDRF)—In January, NDRF consisted of 321 ships including 163 merchant types—26 of which comprise the Ready Reserve Force (RRF).

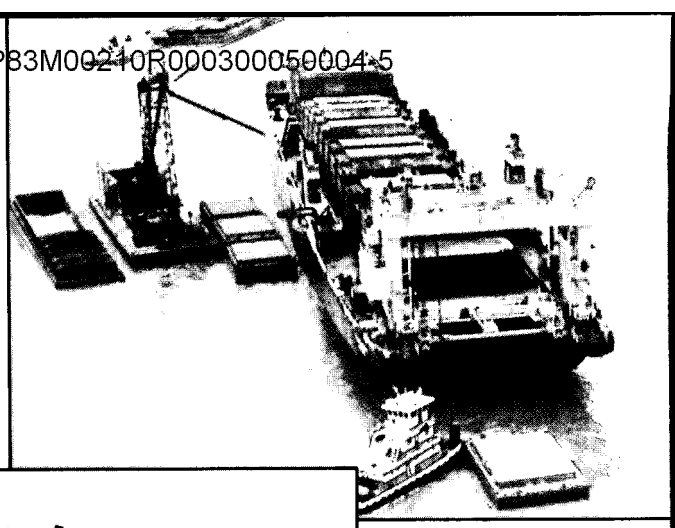
The RRF, maintained by the Maritime Administration and designed to provide immediate surge capability, can be operational in a 5-10 day time frame while the remaining 137 vessels have a projected readiness schedule of 45 to 60 days from date of requisitioning. But MSC admits "that 60-day estimate is rosy." Given delays in yard availability, spare parts, etc., MSC projects that it might "require months" to activate some of the ships, and that the "bulk of these 137 are of WWII vintage and rapidly becoming obsolete."

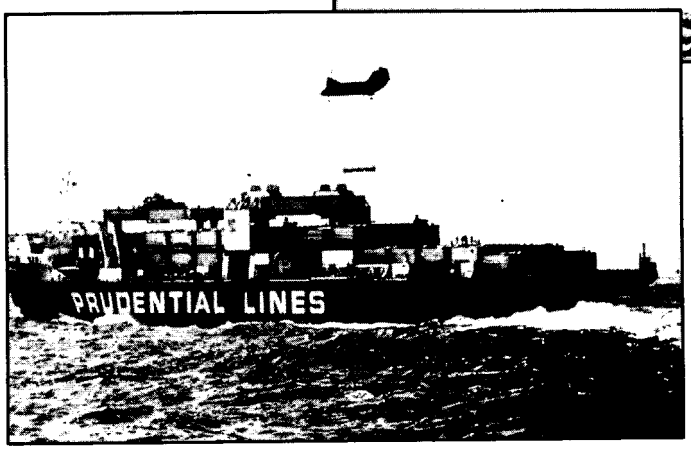
- **Sealift Readiness Program** (SRP)—Privately-owned merchant vessels are committed to the SRP under the Maritime Administration which in turn authorizes ships for DoD use. Presently, 207 ships are available for MSC to provide sealift in a non-mobilization situation. However, according to MSC, problems arise because the Maritime Administration recommendations for SRP implementation are based on the economic impact of DoD's carrier call-up, as well as on international trade and national security demands, and not strictly defense needs.
- **Voluntary Tanker Agreement**—sponsored by the Maritime Administration, this program makes privately-owned tankers available on a voluntary basis for DoD emergency use.
- **NATO Allied Commitments**—NATO allies pool a portion of their merchant fleet for use by any ally in a NATO war. Approximately 400-600 NATO merchant ships would be made available for sealift support. But US interests/needs would be in competition with those of other NATO allies.

Whether DoD's emergency needs can be met today is a question of speculation. But, MSC projects that, "In a NATO war, with NATO ships available, the answer is probably yes." Concerning other scenarios, MSC is noncommittal because the assessment of adequate sealift need changes depending upon the scenario. Variables including the extent of sealift need, how quickly forces and supplies need to be moved, and port conditions and availability would also affect the assessment. A recent Congressionally-directed study of military rapid deployment needs clearly indicated for a Persian Gulf contingency; the nation will need far more sealift and airlift than it has (See accompanying article).

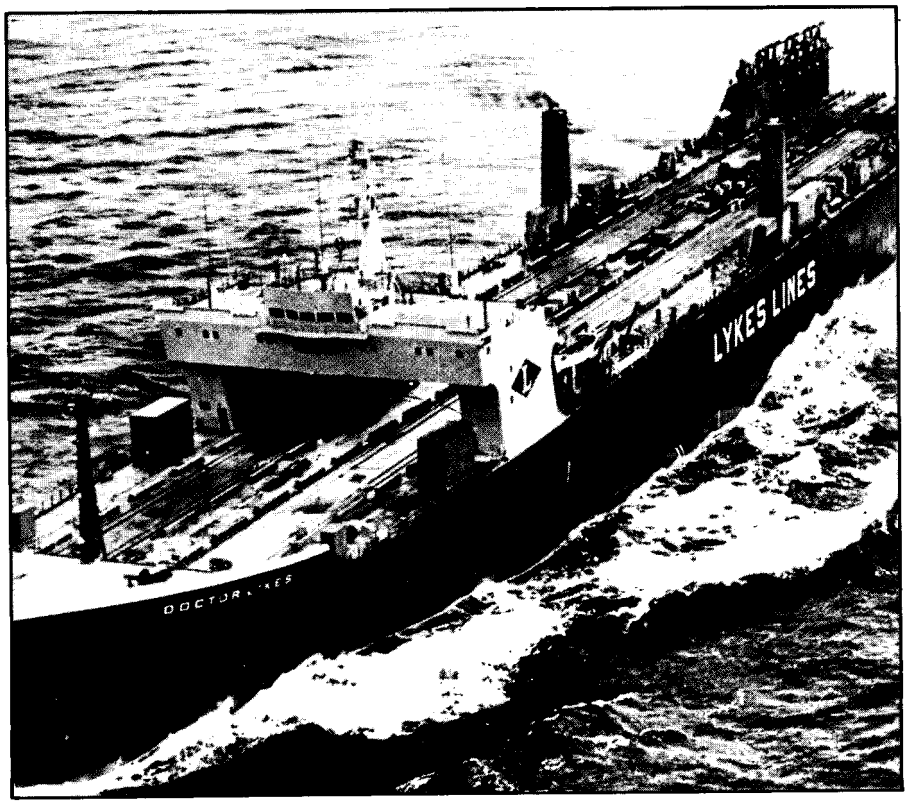
But in concluding its evaluation of US sealift adequacy, MSC urges the establishment of a cohesive and coherent national maritime policy—what it calls "the type of policy which has been lacking throughout the history of the USA." ■☆■

THE PHOTOS TO THE RIGHT AND BELOW are of the Lighter Aboard Ship or LASH 20-foot barge, which loads vertically using an elevator to bring equipment up to ship level where it is then loaded from the rear and slid forward on deck. (US Navy Photo.)



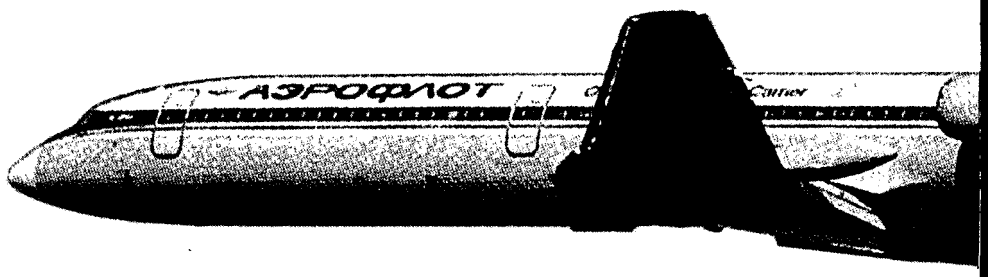


SIMILAR TO THE LASH is the Seabee, pictured below. A 40-foot barge, the Seabee loads equipment via a horizontal lift, then moves it from the ship's rear to front, similar to the LASH operation. (Military Sealift Command Photo.)



Where Russia's "Civil" Airline Goes, Sinister Things Happen—Spying, Air Sweeps, Planting Enemy Agents, and a Slew of Other Covert Activities—and They're Applying for More and More Routes in the US.

Aeroflot



by Ralph Ostrich

THE SOVIET CIVIL AIR TRANSPORT SYSTEM (Aeroflot) and its physical resources are increasingly being used to implement Soviet political and military objectives worldwide. As an integral component of the Soviet military airlift capability, Aeroflot is a significant key to rapid Soviet power projection. Russia's military airlift fleet can move two airborne divisions simultaneously. If Aeroflot were to mobilize the most appropriate 1,000 planes in its 1,650-plane fleet, the major combat elements of a third Soviet airborne division could be simultaneously lifted.

Despite some limitations in Aeroflot's military capabilities, it is clear that Aeroflot has already played a major role in Soviet military and political initiatives, from the Czechoslovakian invasion in 1968, to the most recent intervention in Afghanistan (April, 1980 *AFJ*). Thus, there is great concern in the West over the possible use of Aeroflot in a Persian Gulf contingency.

Because Aeroflot is an intrinsic part of the Soviet government, much of the operational revenue, traffic, and financial data normally available from other international carriers is not attainable from Aeroflot. Nevertheless, information from various sources is available which permits a limited degree of knowledge about the civilian and military aspects of Aeroflot's activities, organization, and capabilities.

The Soviets have, and will most likely continue to utilize, the Aeroflot assets for the following direct military and military-associated purposes:

- Trooplift adjunct to the Soviet Air Transport Command (VTA);
- Intelligence gathering, communications monitoring, aerial surveying, and route development activities useful for future military operations;
- Transporting clandestine agents for surreptitious operations; transporting undercover military personnel for pre-hostility operations (e.g., seizure of airport prior to landings by regular forces); and
- Political "show the flag" means of power projection—making an impression on lesser developed countries of the high state of Soviet technology and advancement, as equivalent to the West.

These four categories of experienced political and military usage of Aeroflot represent a potential threat to US military, economic, and foreign policy interests.

Military Air Transport Dressed in Civilian Finery?

Aeroflot is the world's largest airline in terms of scheduled route mileage and passengers carried. The most recent sta-

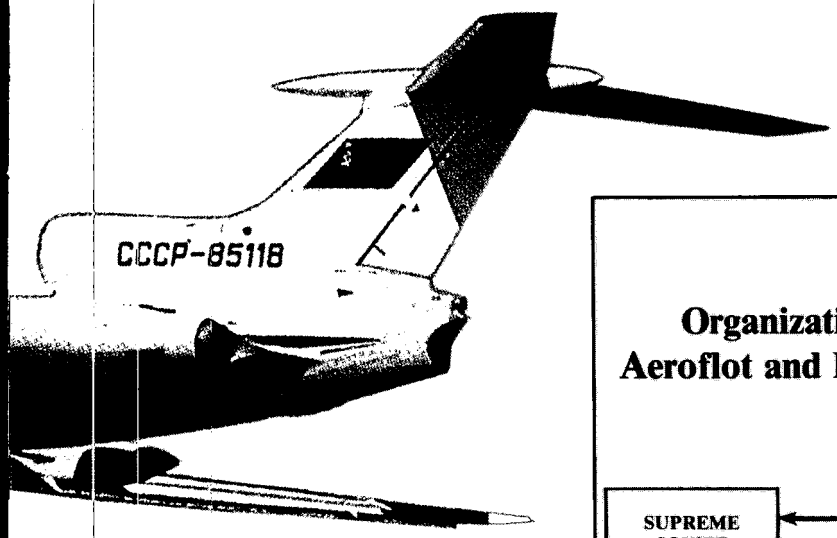
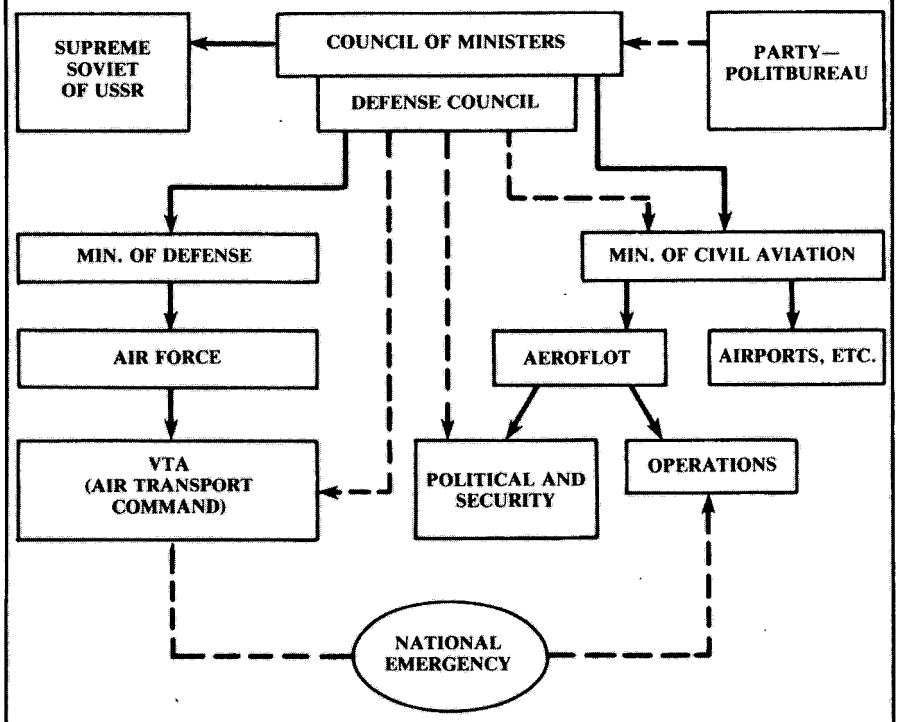


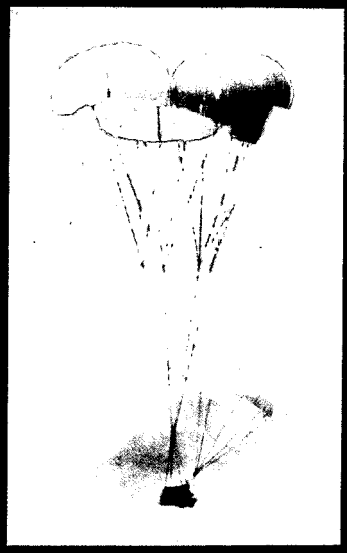
Table One

Organizational and Functional Relationship of Aeroflot and Military Air Transport Command (VTA)

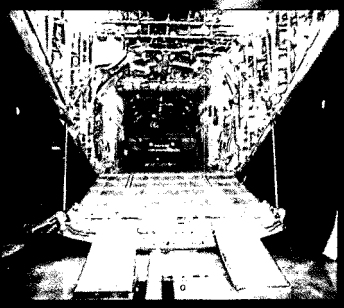


Ralph Ostrich is a senior strategic and political analyst with the BDM Corporation. He has completed his doctoral work in Russian and East European history, also holds a master's degree in psychology, and has authored numerous classified studies for the Defense Department on strategic issues, the Middle East, and the Soviet Union.

VERTOL CH-47C CHINOOK
LIFTING SCORPION



SCORPION DROPPED
BY PARACHUTE



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- **Running costs comparable to similar class wheeled AFVs.**

Out of Scorpion's basic concept a whole range of vehicles has been created to suit any specific requirement — command, support, reconnaissance, casualty evacuation, anti-tank, anti-aircraft, anti-personnel, internal security; other variants can be made to meet other user requirements.

Logistics are simplified: the Scorpion range of vehicles uses common engines (gasoline or diesel), transmission and suspension.

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Range includes:
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STRIKER – armoured guided weapon carrier;
SULTAN – armoured command vehicle;
SAMARITAN – armoured ambulance;
SAMSON – armoured recovery vehicle;
SCIMITAR – armoured 30mm gun, anti-APC vehicle.

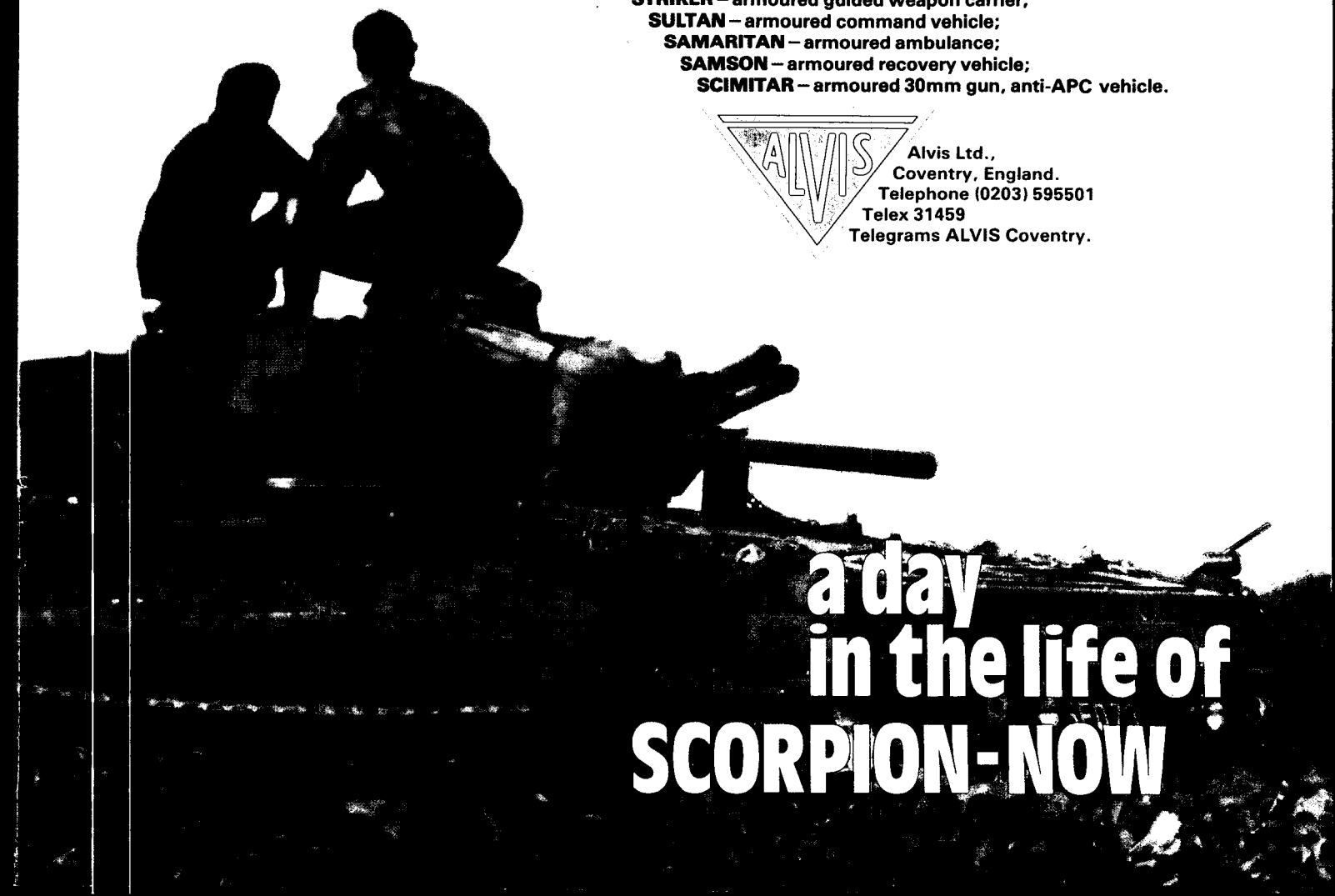

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Table Two

Aeroflot: Inventory of Operational Aircraft

Data Sources: 1977

A/C	Date First Flight	No. of A/C	Troop Carrying Capacity Regular	Troop Carrying Capacity Paratroop	Total Troop Capacity Regular	Total Troop Capacity Paratroop	Additional Non-VTA Reserve Capacity No. Passen	Additional Non-VTA Reserve Capacity Total No. Passen	Maximum Payload Range (Miles)	Maximum Payload (Tons)	Maximum Cruising Speed (MI/HR)
IL-14*	1953	106	40	24	3,180	2,544			288	4	186
TU-104	1955	161					100	16,100	1,300	13	560
IL-18	1957	378					122	65,016	1.990	15	419
TU-114	1957	31					220	6,820	3,850	33	478
AN-12*	1959	132	91	60	12,012	7,920	Cargo Only		730	22	373
AN-24*	1960	148	50		7,400		Cargo Only		340	60	280
TU-124*	1960	60	56		3,360				760	6.5	540
IL-62*	1963	97	186		18,042				4.160	26	550
TU-134*	1964	182					72	13,104	1,490	8.5	540
AN-22*	1965	31	400		12,400		Cargo Only		3,100	88	460
YAK-40	1966	98					27	2,645	1,240	3	342
TU-154	1968	182					72	13,104	1,490	8.5	540
L-410	1969	14					19	266	124	2	236
TU-144	1969	13					140	1,820	4,040	15.5	1,550
IL-76*	1971	2	145		290		Cargo Only		2,700	40	523
AN-30	1973	7			Photography and Mapping Only				1,616		323
AN-28	1974	2					15	30	560	1.6	205
YAK-42	1976	4					120	480	1,118	15	497
IL-86	1977	2					350	700	1,460	22	575
Totals		1,650			56,684	10,464		120,085			

* Designated VTA Reserve Fleet

tistics (1978) are impressive: Aeroflot carried over 100 million passengers and over 2.5 million metric tons of freight to some 3,500 Soviet cities and 70 foreign countries. Though these statistics indicate Aeroflot to be among the leaders in world civil aviation (15% of *all* passengers carried worldwide by *all* of the globe's scheduled airlines and 40% as many as all US airlines combined), roughly half as many passengers as were flown by *all* US airlines in 1973), the opposite is true when passenger and freight revenues are reconciled against specific routes and destinations. What then emerges is an international carrier with an excess of unprofitable routes, and aircraft flying them which are marginally cost-effective.

This should not be surprising, for Aeroflot is essentially a *military* air transport adjunct dressed in respectable civil air finery. The clue to Aeroflot's military linkage is found in its administrative leadership and materiel assets.

Aeroflot is administered by the All-Union Ministry of Civil Aviation. (Prior to 1948, Aeroflot was controlled directly by a civil air division within the Ministry of Defense.) But even since coming under the Civil Air Ministry, Aeroflot continues to be under the leadership of former (and active) high-ranking officers of the Soviet Air Force. Since the 1950s, Aeroflot has been headed by the Soviet Air Force Marshal of Aviation—currently, Marshal B. P. Bugaev. Most Aeroflot personnel, who number between 400-500,000, are either currently in the reserves or had former military status through all ranks. This is especially true in functions dealing with management and operations, which explains the close similarity of ground and flight procedures between Aeroflot and VTA. (Many VTA aircraft are marked in Aeroflot colors.)

The organizational structure of Aeroflot very closely resembles the VTA, and even includes a military-equivalent rank structure. (Maintenance personnel and shop foremen wear some identity of rank, for instance.) The administrative apparatus contains, as do all Soviet organs of government, political and KGB elements to ensure conformity, political reliability, and security.

As is customary in the Soviet scheme of things, Aeroflot is very secretive about the number of pilots, navigators, and other key personnel having equivalent military expertise. (James R. Reitz, in a 1974 study published in *East Europe* magazine on the military uses of Aeroflot, estimated Aeroflot's pilot strength at between 20-25,000, most of whom would be readily available for military transport missions.)

The relationship of the Ministry of Civil Aviation (MCA) to the VTA is shown in Table One. In peacetime, the MCA receives its directions from the Council of Ministers of the Supreme Soviet. However, in extreme emergencies or war situations, the MCA is subordinated to the specially designated Defense Council which in turn reports to the Supreme Soviet through the Council of Ministers. It is through the Defense Council that the VTA utilizes the personnel and materiel assets of Aeroflot.

The military exerts its influence from another significant direction—the design and construction of all Aeroflot aircraft. For example, Aeroflot has a reported 100 IL-76 transports under construction and to be in service by mid-1982, as many as VTA had operational in mid-1980 (July *AFJ*). Those planes, considered by many to be Russia's in-service counterpart of USAF's hoped-for C-X, would increase Aeroflot's long-range troop-carrying capability by 45% and its cargo capacity by over 50%. Although Aeroflot maintains its own operational and flight testing establishments, it does not operate aircraft or engine design bureaus. The responsibility for both military and civil aircraft and engine designs belongs to the Ministry of Aircraft Production, an agency closely tied to the Ministry of Defense.

From the logic of technology and economic requirements for domestic and international passenger and cargo transport, it would make better sense for Aeroflot to purchase superior performance aircraft from the commercial markets of the West. However, the overriding military requirements for a continually utilized, readily available reserve military transport fleet results in Aeroflot's use of aircraft which are far from optimal for the commercial roles they perform.

Because Soviet centralized economic

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One solitary US-3A has already proved its merit as a COD aircraft, shuttling between Diego Garcia and Camel Station. With its aft fuselage enlarged, it would be the only carrier aircraft able to meet all of the Navy's requirements.

One aircraft, five missions. The system component commonality of the ASW-COD-tanker-EW-air defense aircraft would range up to 92%. For people who watch budgets, that means huge savings in spares, maintenance costs and the more productive use of scarce personnel. One aircraft, five missions. That translates into getting more bang for a buck in a time when the bucks must go further and further.

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and production planning authorizes the military to take the lead in aircraft design and engineering decision-making, with input from the civil aviation side considered as less important, the resultant aircraft represents a hybrid with generally more limited applications for civil use. This is evidenced by the fact that earlier models of Aeroflot aircraft were modified medium and long-range bombers with minor allowances made for conveniences expected in civil aircraft. More importantly, however, most Aeroflot aircraft consume more fuel than equivalent commercially-designed aircraft. Furthermore, rates of maintenance, downtimes for engine overhaul, air frame and higher echelon maintenance are higher than those for commercial aircraft. From the standpoint of revenue/payload economics, Aeroflot aircraft have limited carrying capacities for the long-range time/distance parameters which their routes require.

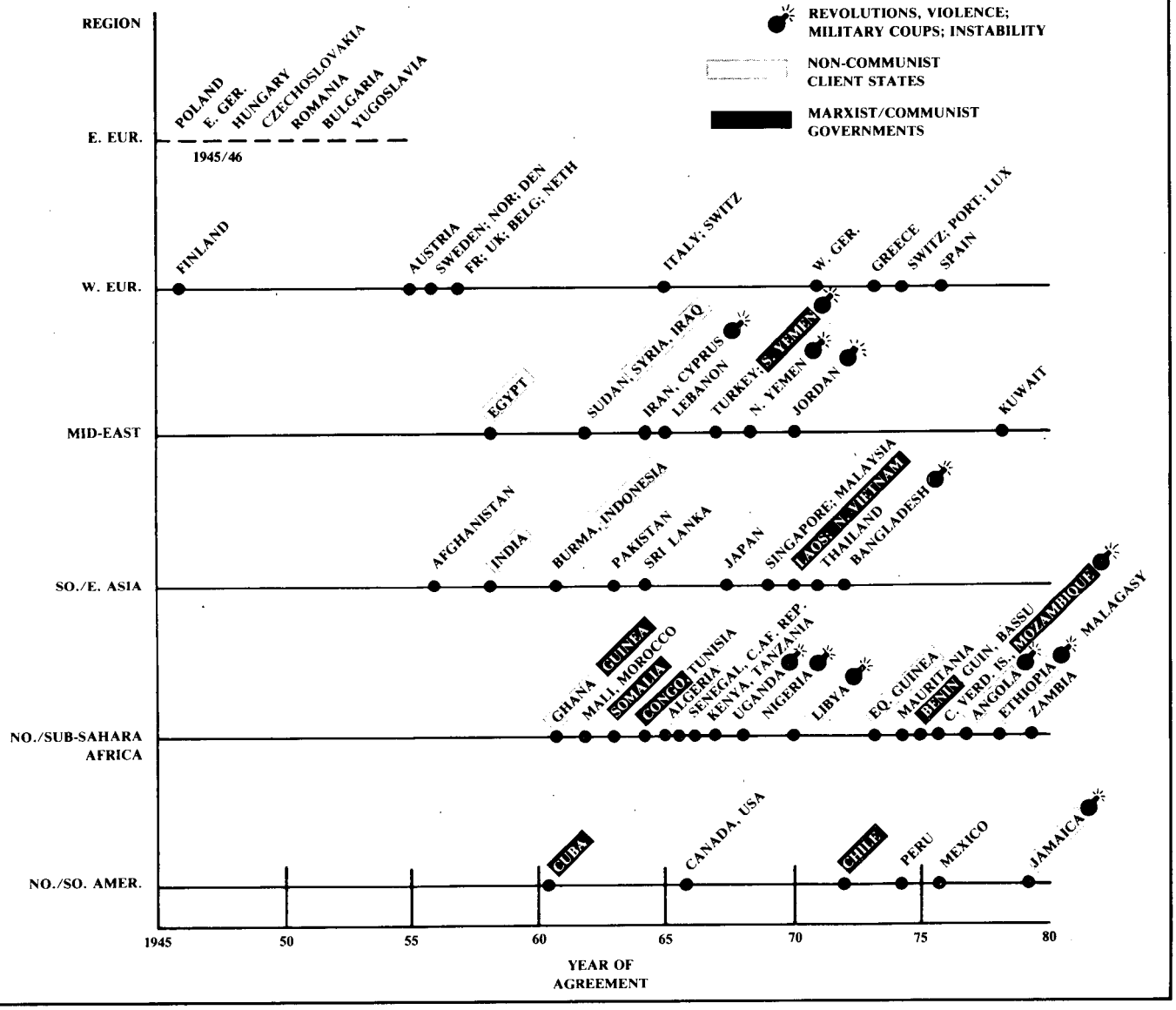
Notwithstanding its shortcomings, Aeroflot is a formidable national asset which the Soviet government has made effective political and military use of, as in Czeckoslovakia in 1968 and Afghanistan in 1979.

The Aeroflot aircraft inventory and related performance characteristics are shown in Table Two. Several significant facts emerge from this data. Foremost is the limited range and payload of its aircraft for long-range service to Africa and the western hemisphere; only the 18-year-old IL-62 exceeds the 4,000-mile range with a maximum payload of 26 metric tons. This limitation is more apparent when compared to the longer range/ greater payload capabilities of the Boeing 747 (80 metric tons carried 6,620 statute miles); Boeing 707-320 (26mt/6,240nm); Douglas DC-10 (50mt/4,272nm); Lockheed 1011 (43mt/4,467nm); and the British Aircraft BAC VC-10 (25mt/4,720nm). Second, it should be noted that the greater portion of the Aeroflot fleet consists of aircraft over 12 years old, with the average aircraft age approaching 20 years.

Nevertheless, when these assets are considered in terms of their troop carrying capabilities, the threat potential is better realized. The six Aeroflot passenger aircraft types designated as VTA reserves in Table Two have a total lift capacity of over 56,000 troops—equivalent to the

Table Three

International Route Expansion of Aeroflot



manpower of at least four Soviet motorized rifle divisions and additional support troops. Looking at the airlift capacity in a more probable situation, where only half the aircraft would be available, a *realistic* airlift of an equivalent two divisions is thus achieved.

Aeroflot's IL-14 and AN-12 aircraft also provide the VTA with the capability of carrying the equivalent of more than a division of paratroops (these planes are specially designed for paratroop drops). Aeroflot's 100 new IL-76s will dramatically increase that capability. The remaining 11 types of non-VTA reserve Aeroflot planes (shown without asterisks in Table Two) represent a backup pool which, if time is not critical, can be mobilized to carry an additional 120,000 personnel. If only 25% of these aircraft were available, an additional equivalent of two divisions could be readily transported over comparatively shorter distances than the VTA-reserve aircraft.

Because of their shorter ranges, most Aeroflot aircraft would require additional refueling for operations in southern Africa, southeastern Asia, and the Western Hemisphere. In view of the fact that Aeroflot has already established terminals throughout northern and sub-Saharan Africa and Cuba, access to distant portions of Africa and Latin America should not prove too difficult a logistical problem. Perhaps the most serious constraint to long distance troop transport is the requirement for frequent crew changes, thus taxing the supply of trained crew personnel.

Evolution as an International Force

From its inception following the Great Civil War in 1922, Aeroflot has been basically a domestic airline serving the needs of the various Soviet governmental agencies rather than the needs of the public, or for financial return. During World War II, Aeroflot was incorporated into the air force where it served with great distinction, performing tactical and transport missions and sustaining losses due to enemy action. Following World War II, Aeroflot extended its service to Eastern Europe, a move designed to affirm its political and economic control of that region.

It was not until after Stalin's death in 1953 that his successors felt secure enough to extend Aeroflot service beyond Eastern Europe with the realization that the Soviet Union would be opened to foreign non-Communist carriers. In light of the desire to extend Aeroflot routes beyond the Communist realm, the political advantages of this policy were not lost to the government leadership. In 1958, Pavel Zhigatev, then Minister of Civil Aviation, noted, "Aeroflot's equipment and route expansion program . . . is new and convincing evidence that the Communist Party and the Soviet government, true to their principles of peaceful coexistence among states with different political systems, are devoting an enormous amount of attention to the construction of aircraft for peaceful purposes,

Table Four
Introduction of Aeroflot Service and Related Critical Events

Date Introd. Aeroflot Svc.	Country	Critical Event	Remarks[1]
1956	Afghanistan	1956—Daoud receives military aid from Soviets; Army turns pro-Soviet	F(1)
1958	Egypt	1957—Suez Crisis; 1958—Soviet rearmament program; introduction of Soviet advisers; by 1960s, attains status of client state	F(3) (5)
	India	Late '50s/Early '60s—Under F.M. Krisha Menon, assumes increasing anti-US and anti-PRC policies; total support of Soviet Union in UN August, 1962—Soviet-Indian Treaty to permit India to build Soviet military aircraft October, 1962—Soviet Union supports India in border war with China 1965—Soviets mediate Indo-Pakistan War at Tashkent; Soviets generally back Indian claims; India now a Soviet client	F(3) (1)
1960	Cuba	January, 1959—Castro's revolutionaries overthrow Batista regime	P(2)
		July, 1959—Castro manifests pro-Communist domestic policy	
		February, 1960—Cuban-Soviet aid agreement; July, 1960—Khrushchev warns US not to interfere militarily in Cuba	C/F(3)
		October, 1960—US charges Cuba with receiving Soviet arms	(4)
		January, 1961—US severs diplomatic relations; April, 1961—Bay of Pigs	
		December, 1961—Castro proclaims himself a Marxist and will bring Communism to Cuba	(5)
		September-October, 1962—The introduction of Soviet missiles/Cuban missile crisis	(6)
1961	Indonesia	Early '60s—Sukharno increasingly assumes pro-Soviet policy; intensifies campaign of subversion and terrorism against Malaysia; supports Malaysian Communist insurgents 1965—Indonesia hosts Second Bandung Conference, although "nonaligned" is pro-Soviet and anti-US and Chinese	F/C (1) (3) (6)

(continued)

[1]Critical Event Occurrence: P—Prior to Aeroflot Service
C—Concurrent with Aeroflot Service
F—Following Aeroflot Service

Type of Critical Event:
(1) Soviet: "Show the Flag;" political symbolism; prestige; power projection; presence/ visibility; operations center (civil aircraft)
(2) In-country: revolution; coup; guerrilla/insurgency; violence; intense political instability/ conditions of "near anarchy"
(3) Soviet: Military assistance (grants/purchase)—direct or indirect, overt/covert, to include materiel/personnel; military aid missions; surrogate forces; military production rights
(4) Soviet: Economic aid; trade agreement; technical assistance programs; developmental programs
(5) In-country base agreement; usage of facilities; establishment of monitoring facilities
(6) In-country support of external insurgency/subversion and terrorism

1962	Iraq	July, 1958—Overthrow of monarchy; establishment of radical revolutionary republic; Iraq withdraws from CENTO	P(3)
		1959—Establishment of economic/military aid programs with Soviet Union	(4)
		March, 1961—Outbreak of Kurdish rebellion; Soviets send arms to aid Iraqis against Kurds	
		1963-1968—Army seizes power; suppression of Communists but Soviet military aid continues	
	Sudan	1960-1961—Active in supporting black "liberation" movements throughout Africa	F(2) (6)
		1964-1965—Actively assisted rebels in Zaire against Mobuta's central government	
		Late '60s—increasing leftist agitation leading to coup of 1971	
	Syria	1956—Soviets begin massive arms shipments	P(3)
		1956-1962—Continued political instability, coups/countercoups	
		1963—Formation of Ba'athist Revolutionary Socialist regime—increased Soviet presence and military assistance	
		1963-1969—Soviets furnish Syria with $235-million of military equipment	
		1967—Soviets help instigate Arab-Israeli Six-Day War	F(6)
	Ghana	Early '60s—Nkrumah becomes increasingly pro-Soviet; Soviets give $10-50-million in military assistance; Soviet economic and military advisers in large numbers. Nkrumah sends Presidential Guard Regiment to train in Soviet Union	C/F(3) (4)
		1965—Soviets provide aircraft for Ghana Airways	
	Guinea	1959—Soviet military assistance program begun, followed by a military mission in 1960—status as Soviet client state	P/C(3)
		1962—Soviets provide fighter aircraft and PT boats; Cuba sends economic and military aid mission	(4)
		During the '60s, Guinea served as base for insurgency against pro-Western governments of Ivory Coast, Upper Volta, Central African Republic, Cameroon, Dahomey, and Senegal	C(6)
		Guinea has been a trans-shipment point for Soviet arms to insurgent groups in West Africa	
		Conakry is utilized by Soviet Civil and Military aircraft as intermediary stop to Western hemisphere and southern Africa	
	Mali	1965—Military coup by leftist junior officers establishes leftist government, but not pro-Soviet or client state status	F(3)
		Mid-'60s to 1971—Mali receives over $20-million in military equipment, including MiG-17 aircraft, T-54/55 tanks, APCs; Mali military personnel train in USSR and Soviet military advisory groups established in Mali *(continued on p. 48)*	

for expanding our economic and cultural ties with all states and peoples."

Beginning in 1955, Aeroflot began cautiously to expand into such "safe" places as Austria and the Scandinavian countries before heading into the rest of Western Europe and beyond.

Aeroflot's expansion worldwide is illustrated chronologically in Table Three. Immediately apparent is Aeroflot's entrance into various regions by stages beyond Europe, first into South Asia, and then into the Middle East, the remainder of Asia, Africa, and lastly North and South America. The singularly most important fact of Aeroflot's expansion into 70 countries is this: 28 of them (40%) became Marxist or Soviet client states immediately prior to or following the introduction of Aeroflot service. More impressive is the fact that if the countries of Western Europe, the United States, and Canada are not included, then the Marxist/client state total increases to over 50% of all the countries served. Half of them became Marxist or Soviet client states just before Aeroflot introduced service, half did so just after Aeroflot began operations there.

Table Four analyzes 101 critical historical events in 47 countries preceding, concurrent with, and following the introduction of Aeroflot service. The most significant results of the analysis of 101 critical events are as follows: (1) Soviet military assistance (human and materiel) follows the introduction of Aeroflot service (Critical Incident 3); (2) the support of terrorism and insurgency in countries adjacent to the country served by Aeroflot (Critical Incident 6); (3) the introduction of Aeroflot service immediately prior to, or concurrent with, political instability or Communist takeover (Critical Incident 6)—this has occurred especially in cases of Soviet support of insurgencies and terrorism in Africa and the Middle East; and (4) the large number of countries served by Aeroflot motivated by prestige and political/"show the flag" to counter influence of the West and the People's Republic of China (Critical Incident 1) and prestige flights to London, Tokyo, and Washington, for example.

It is thus reasonable to surmise that very little of Aeroflot's route structure could be rationalized on the basis of economic and commercial gain. Rather, the data relating to "critical events" in 47 of 70 countries served by Aeroflot suggest other than economic and commercial interests as the primary purpose for the initiation of that service.

Underlying these six observable motives and consequences following Aeroflot's route expansion are such less apparent, but ulterior, reasons as developing an infrastructure for political/ideological subversion, propaganda dissemination, and intelligence gathering.

The Aeroflot Route Network

First and foremost, the Aeroflot route network cannot be justified on the basis

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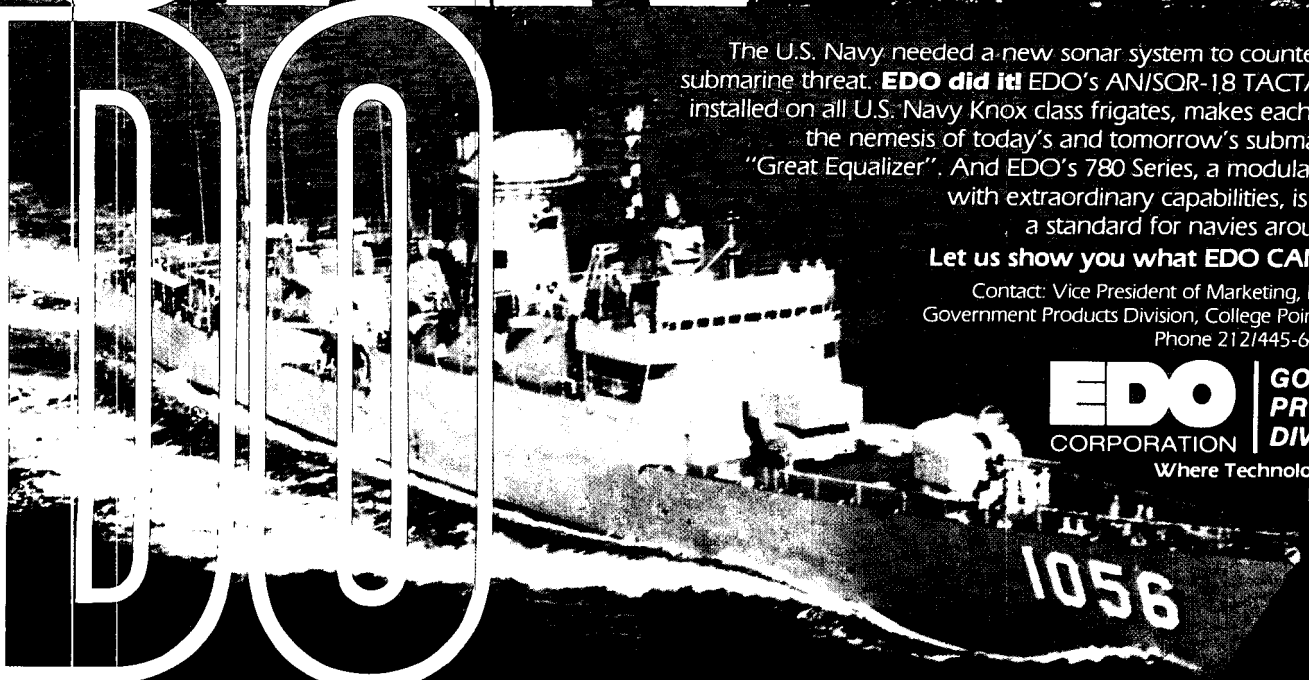

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Critical Events *(continued)*

1963	Pakistan	1965—Though pro-India, Soviet Union mediates Tashkent Agreement on Indonesian-Pakistan War	F(1)
		1966—Soviets agree to sell Pakistan military trucks, helicopters, MiG interceptor aircraft and IL-28 bombers—these sales are an attempt to replace US position in Pakistan and to counter PRC influence in Pakistan	(3)
	Somalia	Although professed nonaligned, Somalia through the '60s becomes increasingly radical due in large part to its disputes with then pro-Western Ethopia and Kenya—Soviets tacitly support Somalia	F(2) (3)
		1969—Leftist Coup-Siad Bekre seizes power—turns to Soviet Union for military and economic assistance—Soviets indicate interest in military base at Berbera	(5)
1964	Algeria	1963—Soviets grant loan of $100-million for arms purchase; by 1971, this total reaches $300-million	P/F(3)
		Since 1964, over 3,000 Algerian military officers have trained in USSR; over 1,000 Soviet military advisors in Algeria after 1964	
		1964/65—Algeria supports rebel movements in Zaire—intelligence reports state Aeroflot used to transport Soviet arms to Algeria for Congolese rebels	F(6) (1)
		During mid-'60s Soviets are in heavy competition with PRC for influence in Algeria—introduction of Aeroflot service as key element in maintaining visibility, presence and prestige, especially in view of Chou En-lai's visit in 1964	
	Cyprus	December, 1963—Fighting breaks out between Greeks and Turks	F(3)
		1964—Soviets support position of Archbishop Makarios against Turks; Soviets supply Greek Cypriots with arms directly and through Egypt	(1)
	Iran	1964/65—Mutually beneficial trade relations established with Soviet Union	F(1)
		1965—The Shah visits Moscow; era of good relations. Even though Iran was decidedly pro-Western, during '60s Soviets continually attempted to gain some degree of presence and influence in Iran	(4)
	Burma	During early '60s—increased Soviet support of General Ne Win's radical/leftist Burma Socialist Program Party (BSPP)—several Communist coups attempted, but failed	C/F (1)
		Mid-'60s—Civil war between Soviet-supported insurgents ("Red Flag") and PRC-supported insurgents ("White Flag")	(2)
	Sri Lanka	1960—Leftist Sri Lanka Freedom Party under Mrs. Bandaranaike takes power—increased leftward shift of domestic and foreign policy, though pro-	C(1)

of financial gain or potential commercial enterprise. Above all else, Aeroflot, like all other organs of the Soviet government, exists for the sole purpose of carrying out whatever policy objective the Kremlin leadership determines. For its part, the Ministry of Civil Aviation is primarily concerned with the implementation of higher policy and the day-to-day operational aspects of Aeroflot. It is highly likely, as in other matters, that the route expansion policy for Aeroflot is being determined by the Presidium of the Supreme Soviet Union and executed by its executive arm, the Council of Ministers (Table One).

The objectives of Soviet foreign policy exert the greatest influence in the direction and timing of the development of the Aeroflot route network. For this reason, if for none other, most Aeroflot routes are economically infeasible, and would be abandoned by profit-motivated commercial air couriers (as indeed they have been).

The most profitable portion of Aeroflot's service (in terms of percentage of filled available seats) outside the Soviet Union is Eastern Europe. This is not surprising in view of Aeroflot's virtual monopoly on flights to the Soviet Union through various incentives to tourist groups and the party faithful. It is an absolute political necessity that the Aeroflot presence in Eastern Europe be omnipresent as a reminder of Russia's distant controlling authority.

Aeroflot service to Western Europe, Japan, and North America at best can be considered a financially marginal operation, but essential as a matter of prestige and manifestation as a "world aviation power." It is Aeroflot's operations and route selection in the Third World and developing nations which are driven by opportunism and strategic factors which override considerations of financial gain or loss. It is a common sight to see Aeroflot aircraft in many African cities empty except for debarking/embarking Soviet diplomatic and other government personnel.

Excluding the cities of Soviet-controlled Eastern Europe and Yugoslavia, Aeroflot flies to 84 other worldwide destinations, divided into nine geographically oriented "services." These "services" include (figure in parentheses indicates number of scheduled stops outside Soviet Union for each "service"): Transatlantic (7); Tokyo (2); Scandinavia (5); Western Europe (17); Southeast Asia (18); Northern Asia (3); Middle East (7); Northwest Africa (20); and East and Central Africa (10). Aeroflot, in addition, maintains a cargo flight service which serves four cities outside the Soviet Union and Eastern Europe.

Further analysis of the route structure outside the Soviet Union and Eastern Europe shows that nearly 200 weekly round trips are made to the above-mentioned 84 cities. Although it would be expected that London and Paris would receive frequent weekly Aeroflot flights, the high frequencies of Havana, Bombay, Cairo, and Tripoli reflect the strategic and political im-

portance of the regions encompassing these cities, i.e., the Caribbean, the Indian Ocean, the central and eastern Mediterranean Seas, and their littorals.

Moreover, the numerous weekly flights into London, Paris, Frankfurt, Milan, (besides 13 other Western European cities) and Scandanavia, provide the Soviets extensive timely area coverage of vital regions of the West.

This continuous information source provides Soviet authorities with the most current and voluminous data source for critical intelligence information pertaining to such factors as weather, shipping, air/ground traffic flow, large-scale troop movement, and observation and monitoring of certain designated ground facilities.

Equally important to the Soviet information gathering apparatus and long-range strategic planners are the 30 scheduled weekly stops throughout the northern two-thirds of the African continent. Practically every important political center or strategically important region has been covered by Aeroflot's "services" to Africa, for the most part carried out in once a week round trip flights.

The Soviet Union maintains its political and strategic interests in Southeast and Northeastern Asia by weekly or twice-weekly flights to Vientiane, Phnom Penh, Hanoi, Saigon, Ulan Bator, and Pyongyang, besides some intermediate stops in neighboring countries where the Soviets maintain an active political interest.

It is only in the western hemisphere where the Aeroflot network could be considered "underdeveloped." Though it is in their strategic interests to expand in the Caribbean and South America, they are restricted to Havana, Mexico City, and Lima. Likely short-term targets for expansion are Managua, Panama City, Granada, and other politically opportune Caribbean countries.

The only regions of the world denied to Aeroflot are the larger portions of the western hemisphere, Australia and New Zealand, and the great Pacific Ocean basin. Most conservative and politically antagonistic regimes of the western hemisphere, including the United States and Canada, have denied or severely restricted Aeroflot service on the basis of mistrust, political leverage, and pure financial infeasibility. Australia and New Zealand have denied Aeroflot service simply because they have judged that there would be insufficient passenger traffic on Aeroflot, and that Qantas and Air New Zealand have no financial gain to be realized in service to Moscow.

It is acknowledged that various types of intelligence and political activities are conducted by other nations' flag carriers for their respective governments to some degree (including the United States), but hardly at the degree and intensity of Aeroflot and its surrogate airlines in Soviet client states. Furthermore, even though such activities are pursued by other foreign

1964 ***(continued)***		**fessed nonaligned policy by government 1964—Premier Chou En-lai pays three-day visit to gain support in border dispute with India; Soviets counter with anti-Chinese rhetoric**	
	Congo (Brazzaville)	**1963-1968—Pro-Marxist civilian government in power; Cubans serve as cadre for training Presidential Guard and People's Militia—this situation produced conflict with the Army until it seized power in 1968**	**P(2)**
		After 1963, Congo has been a base for Communist and radical subversion in Zaire and southern Africa—arms very likely brought in on Aeroflot aircraft	**C/F (6)**
1965	**Senegal**	**Soviet interest mainly in acquiring strategically located base at Dakar for shorter route to Latin America**	**F(1)**
	Tanzania	**1965-1970—PRC heavily involved in economic assistance and development of railroad to Zambian copper mines Soviets, during '60s, concerned about PRC influence in Tanzania and East Africa. Aeroflot base at Dar es Salaam important for political, intelligence, and strategic purposes**	**F(1)**
1966	**Lebanon**	**1965—Intense anti-American and anti-West German disorders due to FRG recognition of Israel**	**P(2)**
		Late '60s—Beginning of Soviet arms shipments to PLO, much of which was used against Jordan, Israel, and Christians in civil war	**F(6)**
	Japan	**Although no political/military consequences, Aeroflot presence in Tokyo a matter of high prestige and visibility Soviets hope entre to Japan would present them with market for IL-62 aircraft**	**F(1)**
	Canada	**Soviets hope that route to Montreal would extend across Canada to give them access to Trans-Pacific route**	**F(1)**
	United States	**Aeroflot access to US highly prestigious; symbol of "detente"; hopeful of extending to West Coast and Trans-Pacific route.**	**F(1)**
1967	**Turkey**	**1967—Intense anti-American feelings, riots over US opposition to Turkish occupation of portion of Cyprus—possible Soviet attempt to exploit anti-Americanism**	**C(2)**
	North Yemen	**Late 1966 resumption of civil war with Egypt (and Soviets) supporting rebels and Saudi Arabia supporting government/royalists**	**P(2) F(4)**
		Soviet economic aid to North Yemen including development of strategic port of Nudaydeh	
	Cameroon	**Mid '60s to 1970—Communist backed Union of Cameroon People's (UCP) insurgency**	**P/C(2)**

(continued next page)

1967 *(continued)*	Nigeria	July, 1967 to mid-1969—Nigerian civil war; Soviets supply Nigerian government with aircraft and other arms against secessionist Biafra (Eastern Region);	L/F(3)
		Soviet Union and PRC in intense competition during '60s for influence	F(1)
1969	South Yemen	June, 1969—Extreme Marxist wing of National Liberation Front seizes power in coup; internal conflict between pro-Moscow and pro-Peking factions, with pro-Moscow faction victorious	C(2) F(3) (4)
		1975—South Yemen becomes Communist-dominated Yemen People's Democratic Republic	(5)
		1970—Soviet influence increases; military aid and support of confrontation with North Yemen and Oman over Dhofar region	(6)
1970	Jordan	1968-1970—Increasing power of Soviet-supported PLO against monarchy creates "state within a state"	P/C(2)
		September 1970—"Black September"—Soviet and Syrian backed PLO attempt coup against monarchy	
	Libya	September 1969—Col. Qaddafi leads radical coup against monarchy	P(2)
		June 1970—US evacuates Wheelus Airbase; British evacuate bases in eastern region at request of Qaddafi	
		Mid-1970—First order for Soviet tanks negotiated	F(3)
		March, 1972—Libya signs "technical" and economical aid agreement with Soviet Union; this agreement probably disguises secret arms deal	(4)
	Laos	1969/70—Intensive North Vietnamese and Communist guerrilla activities in north (Plain of Jars) results in loss of region to government	P/C(2) (3) (6)
		February, 1970—Souvanna calls for reconvening of 1962 Geneva signatories to halt Communist offensive—rejected by Soviet Union	
		Late 1970—Beginning of Communist offensive which marks final effort to defeat royalist and Neutralist forces	
1971	Thailand	1970—Height of communist terrorism in northeast and great concern over North Vietnamese/communist conquest of Laos and Cambodia	P/C (2)
1972	Bangladesh	Soviets support Bangladesh independence movement in early '70s	C/F(1)
		December, 1971—14-day war of independence; Soviet Union supports India in war against Pakistan; Soviet support critical to India's alliance with Bangladesh independence movement	
		Soviet support of Bangladesh (and India) has virtually eliminated PRC influence in sub-continent	

(continued on p. 54)

carriers, they do not pose a significant threat to the security interests of the United States or its allies. Aeroflot does pose such a threat.

The Aeroflot Threat Potential: Aeroflot as an Adjunct to VTA

The greatest and most obvious threat posed by Aeroflot is its personnel and materiel transport capabilities as an adjunct to the VTA. The seven Aeroflot aircraft types designated as the VTA reserve fleet (AN-12; AN-24; IL-14; IL-62; Tu-124; IL-76; and AN-22), when combined with VTA assets for both personnel and materiel transport make a significant contribution. Tables Five and Six show the Aeroflot contribution, by military transport aircraft type, to the potential total lift capabilities for personnel and materiel. In personnel transport, Aeroflot's most significant contribution is in the long-range aircraft (Tu-124, IL-62, AN-22, and IL-76). Aeroflot can lift almost as many personnel as VTA over long ranges and about 70% as many over shorter ranges, as shown in Table Eight.

In the matter of materiel lift augmentation to VTA, except for a significant contribution of the long-range IL-62's limited payload capacity, a more modest contribution is made by the older, long-range AN-22. The most significant materiel transport augmentation is made by the short-range AN-24. These aircraft would be used as "work horses" in combat logistics environments such as Central Europe, Afghanistan, Iran, and the Middle East. The percentage augmentation for short- and long-range materiel transport is also shown in Table Eight. Aeroflot augmentation for long-range materiel transport (39%) is also significant. These long ranges (up to 4,000 miles) would apply most to African and western hemisphere missions.

Addition of the 100 IL-76s mentioned earlier would increase the long-range personnel transport capability by 45% and cargo capacity by over 50% by mid-1982.

The AN-22, in service since 1965, has been the mainstay of the VTA because of its versatility in long-range personnel and materiel transport. For example, it is capable of carrying equipment ranging from large amounts of munitions to main battle tanks, missile launchers, and self-propelled artillery. Though it lacks the range and payload capacity of the American C-5, the AN-22's rear loading lets it handle large bulk cargo and most Soviet fighting vehicles.

In addition to the technical and functional capabilities of Aeroflot's reserve fleet, their value is enhanced by immediate to short-term availability of both aircraft and crew/maintenance personnel. Since most crew and key maintenance personnel are members of the Soviet Air Force Reserve, it would be a relatively simple matter to transfer them to active Air Force status with their aircraft. Moreover, a significant portion of Aeroflot's personnel and

SCIENCE/SCOPE

U.S. Army forward observer teams operating from armored vehicles will be able to pinpoint targets for laser-homing weapons or conventional weapons by using a modified Ground/Vehicular Laser Locator Designator. The device was developed by Hughes to be mounted on the M113 Fire Support Team (FIST) armored vehicles. It determines the distance to a target based on the length of time for a burst of laser light to reach the target and bounce back. The laser beam also can illuminate the target to provide a bull's-eye for laser-homing weapons.

For the first time a weapon delivery system will let pilots of single-seat aircraft find, track, and destroy surface targets day or night while flying at high speed and low altitudes. The system is called LANTIRN (Low Altitude Navigation Targeting Infrared for Night). It would be mounted in a pod outside U.S. Air Force F-16 and A-10 aircraft. LANTIRN includes a forward-looking infrared sensor and a terrain-following navigation subsystem for low-level day and night operations. It automatically can recognize targets, "hand off" a target to an infrared-guided Maverick missile, and designate a target with a laser beam for a laser-guided bomb to home on. Hughes, teamed with Martin Marietta, is responsible for the target recognizer and boresight correlator for Maverick hand-off. The LANTIRN program is directed by Aeronautical Systems Division, deputy for reconnaissance/electronics warfare systems at Wright-Patterson AFB.

Eight more U.S. Navy guided-missile frigates of the FFG-7 class will carry advanced consoles for displaying data from ship radars and acoustic, TV, and electronic warfare sensors. The Hughes AN/UYA-4 consoles will be part of the Naval Tactical Data System, which links ship sensors, computers, and weapons while detecting, tracking, and evaluating enemy threats. The consoles have more display capability for tactical symbols, operate at higher data rates than earlier systems, and are more reliable. The displays are installed on or planned for more than 100 ship and shore installations of the U.S. and its allies.

Technicians in the field will be able to make quick fixes on the F/A-18 Hornet strike fighter's radar with the aid of an automatic radar test system. The AN/USM-469 system, which is suitable for U.S. Navy ships and U.S. Marine Corps vans, consists of five and a half bays of test equipment and a single-bay liquid cooler system. It uses production test software to ensure common standards between the factory and the field. One operator position tests the AN/APG-65 radar's transmitter, antenna, and receiver-exciter. A second tests the radar signal processor and radar data processor. A video display shows test results, fault types, locations, and other pertinent data. The test system, like the radar, is built by Hughes under contract to McDonnell Douglas Corporation.

A new communications system delivered to the U.S. Navy saves weight and space over previous systems. The Hughes tactical information exchange system (TIES) uses a single set of hardware to accommodate many different digital and voice communications processing. This was made possible by a new frequency translator unit and a programmable signal processor. Previous systems used separate pieces of equipment for amplitude modulation or frequency modulation of voice and data.

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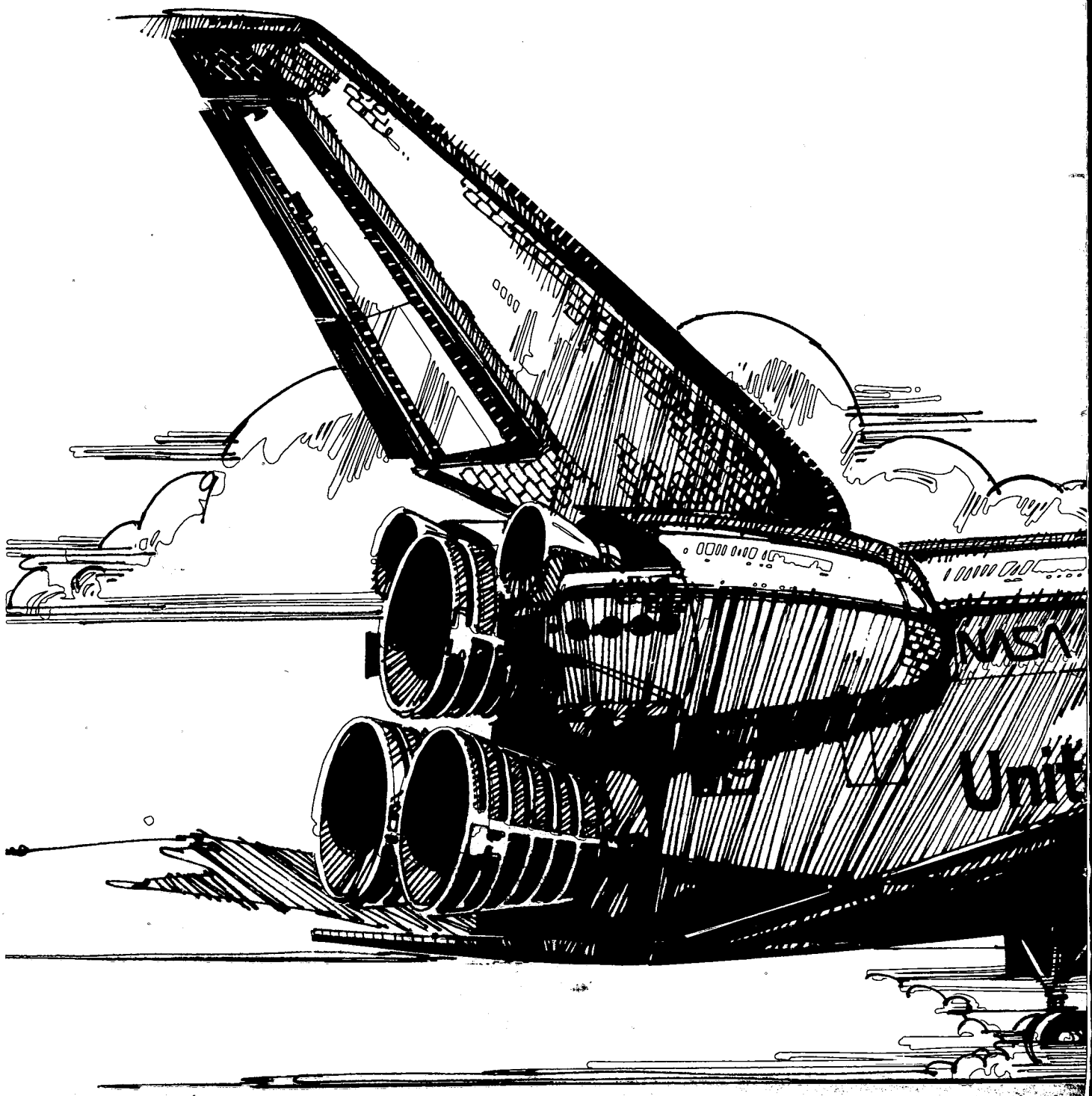

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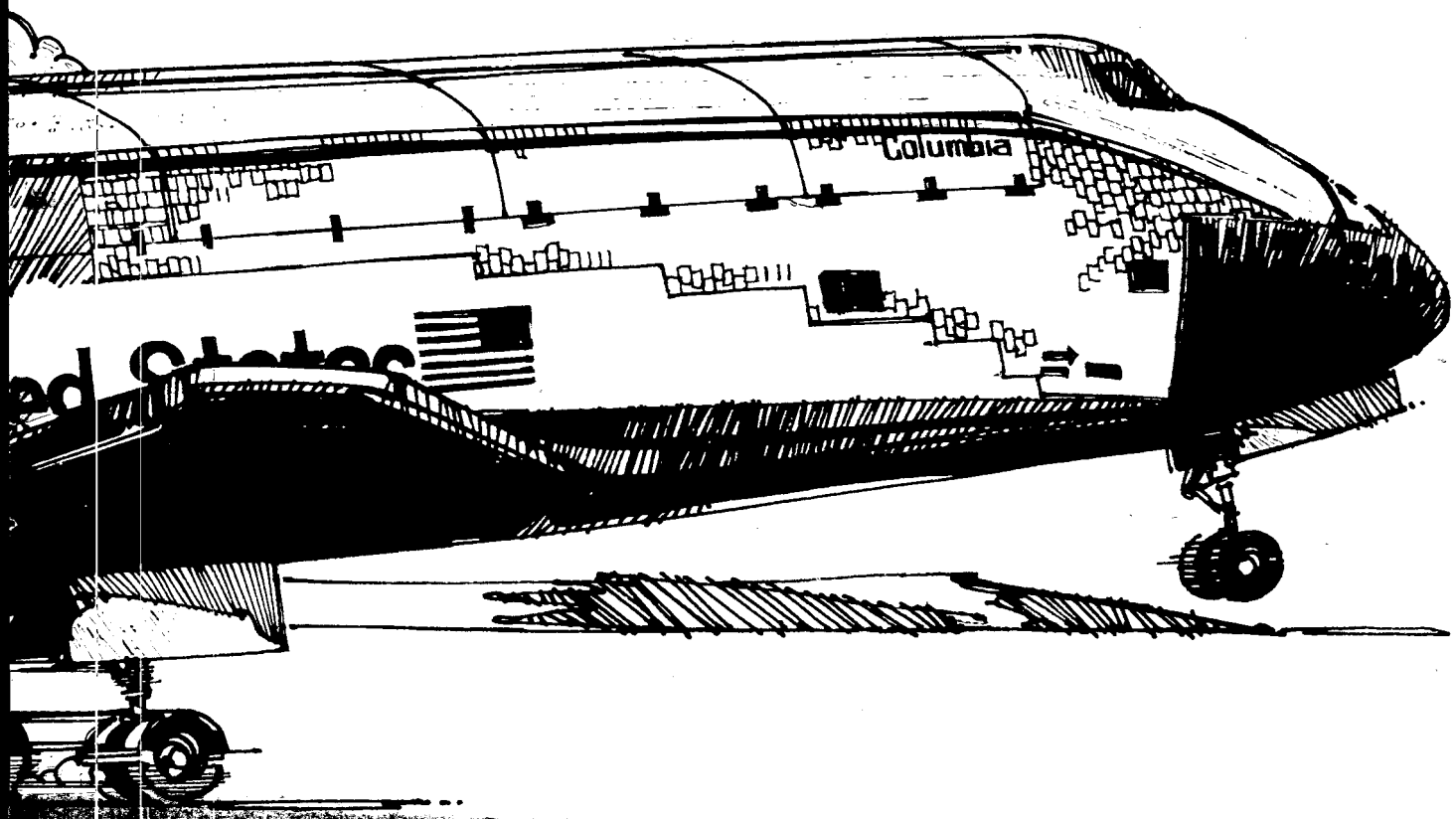


1972 *(continued)*	Chile	September, 1970—Allende's Marxist-backed Popular Unity Coalition wins 36% of vote and is confirmed as President 1971—Municipal elections returned 50% of vote favoring Allende August 1972—Anti-government riots; Army takes control October 1972—Riots over inflation and economic conditions; Army extends control to include most of country 1973—Allende increases leftist political/economic policies August, 1973—Continuing labor unrest/severe government crisis September 12, 1973—Military coup, Allende overthrown, Aeroflot service to Chile suspended	C/F (2) (1)
	Colombia	January, 1972—Strong leftist guerrilla attack on town of San Pablo—Army begins counter-terror campaign Throughout 1972 continued sporadic guerrilla activities in remote and rural regions There is no known direct or indirect Soviet support for the insurgents though Soviet materiel may be passed through Cuban contacts	C(2)
1973	Equatorial Guinea	August, 1972—President Marcias proclaimed "president for life"—establishes close contacts with Eastern Europe; receives some economic and military aid	C/F(3) (4)
	Peru	1970—Following earthquake, Soviets give substantial aid utilizing Aeroflot—since then, Soviets have persisted in establishing route to Lima via Havana August, 1973—President Velasco overthrown in coup November, 1976—Peru signs purchase agreement with Soviets for 22 aircraft, 200 T-62 tanks and other military equipment April, 1978—Moscow reschedules 80% of payment due in 1980 to extend through 1988 1978—Six AN-26 transport aircraft purchased from Soviet Union 1980—Additional 16 Su-22 fighter aircraft purchased from Soviet Union	C/F(2) (2) F(3)
1975	Benin (formerly Dahomey)	October, 1972—Military Revolutionary government under Col. Kereku seizes power—increased radicalization November, 1974—Kereku proclaims that a Marxist-Leninist course would be followed November, 1974—People's Republic of Benin proclaimed	P(2)
	Guinea-Bissau	September, 1974—Independence from Portugal—immediately afterwards, close ties established with Communist Bloc—small economic aid program from Bloc established	

aircraft are frequently used for troop transport during Russia's routine, semiannual troop rotation in Eastern Europe (April 1981 *AFJ*). This participation by Aeroflot provides crews and maintenance personnel with highly relevant practice and training in tactical troop movement procedures.

The use of Aeroflot assets in the semiannual troop rotation program provides yet another potential threat, particularly to unsuspecting neighboring countries. During the troop rotation periods the troop-laden aircraft could easily be directed to seize or occupy a political/military objective from an unwary victim. The efficiency of utilizing Aeroflot assets for such purposes during the rotation period was made evident during the August, 1968 Soviet seizure of Prague's international

Aeroflot's Intell

THAT THE SOVIET GOVERNMENT uses the assets and designated routes of Aeroflot for general information and specific intelligence gathering is certain, Defense Department officials say. Periodically, members of Aeroflot's foreign airport ticket agencies and maintenance staffs have been arrested for illegal activities including espionage and attempts to gain access to security information through use of local nationals.

During 1980, for example, Aeroflot employees in Brussels and Madrid were expelled for undefined "illegal activities" and customs violations. Closer to home, three Cuban airline pilots were arrested last September as suspected espionage agents. An FBI agent, Arthur F. Nehrbass, of the Miami office, stated that the Cubans were arrested on "information we developed as an outgrowth of investigations into Cuban intelligence matters." In February of this year, Ricardo Escartin, who was First Secretary of the Cuban Interest Section and who functioned also as Cubana's representative in Washington, was expelled for "enticing illegal trade." The FBI also identified him as an intelligence agent.

Another interesting fact emerges from Cubana's operations in the United States. There are currently three Cuban "security agents" permanently residing in Miami ostensibly assigned to protect Cubana's single weekly chartered flight. DoD authorities who monitor Cubana's activities report these agents "are never to be found, even when the Cubana aircraft is at Miami." This was borne out several weeks ago when an anti-Castro agent attempted to drive a vehicle into a Cubana plane at Miami and none of the Cuban "security agents" were present to protect the aircraft.

Aeroflot's extensive network through Western Europe permits it to observe all aspects of commercial and, indeed, some important military installations lying along or adjacent to its flight paths. It is not unusual for Aeroflot (or its counterpart surrogates), to veer "accidentally" off its prescribed flight path to overfly troop movements and maneuvers in Western Europe and NATO naval exercises.

airport and other key centers during its takeover of that country.

The use of Aeroflot aircraft and crews in the Soviet occupation of Afghanistan, and its utilization in logistical support for Soviet and surrogate forces in Angola, Ethiopia, and South Yemen are other examples of the value of Aeroflot as an adjunct to the VTA.

Aside from the transport aircraft, Aeroflot also maintains and operates a large fleet of specially designed aircraft used for crop dusting and other chemical spraying functions. These aircraft could easily be utilized for tactical employment of chemical and biological agents if the Soviets should consider these aircraft expendable, since few would likely survive the hazards of a combat environment. ■☆■

igence Activities

This practice, however, is not limited to Europe; there are numerous incidents over the past 15 years of Aeroflot, Cubana, and other surrogate carriers straying off designated routes to observe events and places of interest in the United States.

The matter of Communist bloc illegal overflights over restricted areas in the United States caused the US Air Force last summer to issue the following standing note of concern in a memorandum to all its designated critical installations:

"There are indications that Communist airlines have SIGINT [signal intelligence] collection missions in Western Europe—there is no evidence to date that Aeroflot uses such collection capabilities in the United States' air space. However, the CONUS overflight capabilities of Aeroflot along with their unevaluated collection capabilities does present a threat of unknown dimensions. All recipients of this message are advised to take appropriate actions to safeguard sensitive communications and ongoing operations."

According to some Air Force authorities, there is reason to believe that Aeroflot has already engaged in some form of electronic intelligence, such as monitoring VHF and UHF at certain locales along their flight paths in the United States.

Air Force liaison officers at FAA assigned to monitor Communist airline flights over the United States stated that the various air controllers covering the northeastern US reported receiving requests at a rate of as much as four per month from Cubana, Lot, and CSA airlines to overfly the restricted regions of the Hudson Valley and Connecticut on their flights to and from Montreal. They requested these routes in order to "avoid the heavy traffic" of their authorized flight routes.

Perhaps the Watervliet Arsenal near Albany, the Knowles Atomic Power Laboratories, or the many electronic and naval facilities of the Hudson Valley and Connecticut are specially designated high priority targets for the Soviet intelligence data collection effort. *(continued on p. 56)*

1976	**Angola**	**January, 1975—Portugal attempts to establish independent Angola with all parties represented in transitional government—MPLA (Supported by Soviet Union) attempts military seizure of power but is opposed by FNLA (supported by PRC and Zaire, and tacitly, the US)**	**F(2) (3) (4) (6)**
		July, 1975—MPLA requests and receives Cuban troops and arms; US begins supplying arms to FNLA and UNITA in August, 1975	
		October, 1975—Aeroflot utilized in transporting much of 15,000 Cuban troops to Angola	**C/F**
		By early 1976—Cuban forces defeat FNLA/UNITA in convention combat; FNLA/UNITA begin guerrilla operations	
		Throuthout 1976—Soviets rearm Cuban and MPLA forces; process still continuing	
	Mozambique	**June, 1975—Independence—Establishment of Marxist People's Republic**	**F(3)**
		April, 1977—US intelligence reports heavy influx of Soviet/East European arms—most likely destined for Rhodesian and South African black liberation forces—Aeroflot utilized for arms shipment	**(5)**
	Mexico	**September, 1977—President Portillo announces political reforms which permit Communists to form legal party and participate in elections**	**F(1)**
1977	**Ethiopia**	**September, 1974—Radical military junta overthrows monarchy of Haile Selassie**	**P(2)**
		January, 1975/76—Civil war between government forces and Eritrean secessionists	
		February, 1977—Col. Mengistu seizes power from Provisional Military Government—cuts ties with US and West	
		March, 1977—Castro visits Ethiopia	
		April, 1977—200 Cuban military advisors airlifted to Ethiopia utilizing Aeroflot aircraft; US facilities closed and military advisors expelled	
		May, 1977—Mengistu visits Moscow—series of military and economic agreements negotiated	**C/F(3)**
		July, 1977—Heavy fighting breaks out between Ethiopia and Somali "Liberation" forces	
		September, 1977—$500-million arms agreement signed with Soviet Union (48 MiG aircraft; 200 T-54/55; SAM and ATK missiles)	
		November, 1977—Soviets begin large scale arms and personnel airlift—Aeroflot aircraft plays significant role in airlift; by January, 1978, estimated 2,000 Soviet and surrogate advisers arrive	
		May, 1978—Ethiopia receives 224 MiGs—launches counteroffensive	

(continued next page)

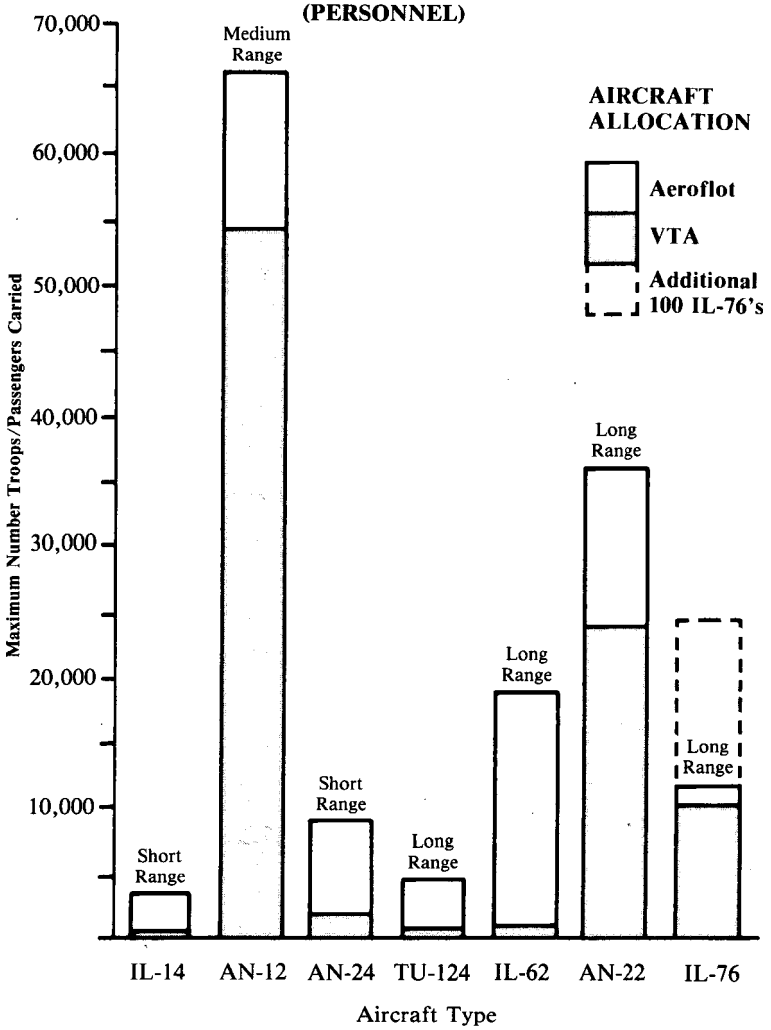
		against Somali forces November, 1978—USSR-Ethiopia sign long term Treaty of Friendship	C/F(5)
	Zambia	Mid-'70s—Zambia accepts Soviet/East European military equipment for Rhodesian black liberation forces Soviet Aeroflot aircraft most likely utilized to transport arms to Zambia	P/C F (6)
1978	Jamaica	December, 1976—Leftist Premier Minister Manley assumes power with large majority April, 1979—Manley flies to Moscow to establish closer trade and economic ties	F(1)

Table Five

Soviet Transport

One Time Lift Potential for Contiguous Power Projection

(PERSONNEL)



Aeroflot and surrogate airlines have requested transcontinental "charter" flights which have coincided with missile firings, troop maneuvers, and practice Strategic Air Command alerts. The continual desire of Aeroflot and surrogate carriers to establish scheduled or non-scheduled "courier" and "special" flights to southern California and the Seattle area, which would pass through some of the most sensitive defense-related facilities, is of great concern to Defense Department authorities. To date they have been successful in convincing the CAB and the State Department that it would be inimical to the security interests of the United States to authorize such flights. The denial of west coast landing rights has effectively denied the Soviets the routes which they desire across the Pacific.

CSA's April 10-12 "Special Flights" and the Space Shuttle Launch

ON APRIL 8, two days before the Space Shuttle was to make its first launch from Cape Canaveral, FL, the US received an extraordinary request through unusual diplomatic channels from CSA (Czecholsovakian Air Lines) for a "special flight" through US airspace on April 10 which, it quickly became clear to US officials, would overfly the Cape (or very near it) during the launch. CSA had never requested any such special flights in recent years. This one was requested at the last minute, through unusual channels, and in a way that raised eyebrows throughout government agencies concerned with such matters.

The flight was to leave Prague early April 9, fly to Montreal, then go on to Havana, and return early on April 10, the morning of the launch, flying near the Cape, enroute to Gander, Newfoundland to refuel before returning to Prague. A number of US officials wanted to deny the overflight rights, but the channels and mechanisms for doing so are often complex and time-consuming, and as of late evening, April 9, the Havana-Newfoundland flight was still on. When new Federal Aviation Administrator J. Lynn Helms learned of the problem through other channels late that evening, he took quick and decisive action to deny CSA's overflight rights during a critical four-hour time window the next morning. As soon as the Shuttle launch was postponed, CSA began filing alternate schedules that might, it appeared, coincide with the final April 12 Shuttle launch. Helms subsequently denied two more such CSA flights out of Havana which were to fly through FAA's Miami oceanic area. Thus, it is clear that FAA's Helms is keenly interested in the overflight issue and personally following developments, far more so than some FAA officials have in recent years.

(What the CSA flights were carrying was not known at *Journal* press time. The two events may be totally unrelated, but *AFJ* has also learned that about the time of the Shuttle launch, two Soviet reconnaissance aircraft flew close enough off the Florida coast to "garble up" the Shuttle's UHF communications channels with their own traffic—and persisted in doing so until the North American Air Defense Command directed them on another course.)

The Editors

Covert Operations

The use of legitimate Aeroflot operations for the insertion of undercover agents and clandestine forces into the designated target is a tactic repeatedly employed by the Soviets. It is highly likely that Aeroflot is the primary means of introducing Soviet intelligence agents and other covert operatives throughout the world, but especially in Africa and other less developed regions.

During the 1968 Czech crisis, an unusually large number of Soviet "government officials" were observed debarking Aeroflot planes at Prague; in fact, several accounts reported that Soviet "civilians" debarking at the Prague airport immediately seized the airport while being led by the former Director of Aeroflot operations there. At Kabul, Soviet commandos, ferried in an Aeroflot aircraft in a routine flight, reportedly seized that airport prior to the advance of the airborne forces. There is good reason to believe that most of the Soviet combat brigade elements recently introduced into Cuba were surreptitiously brought there by Aeroflot over an extended period of time so as not to arouse suspicion and alarm the United States.

"Showing the Flag" and Explicit Power Projection

The use of military and technological assets of one country to impress, or indeed, to intimidate another country in the guise of "showing the flag," or "gunboat diplomacy" is an ancient and accepted practice brought to its peak by the British in the 19th century.

Though a late arriver in the competition for global influence and power, the Soviets have, since World War II, more than made up for their tardiness. In particular, since the expansion of Aeroflot into the world's lesser developed regions in the '60s, that carrier has been effectively utilized by the Soviet government as an instrument of political influence and power projection. Throughout parts of Africa, Aeroflot is the only means for international travel. For example, Burundi and Rwanda have requested Aeroflot service since they lack access to regions beyond their own immediate environment, and desire the "prestige" of an international carrier arriving in their capitals. Whereas other commercial carriers will eschew service to unprofitable destinations, Aeroflot will not, if the venture is deemed potentially exploitable for political or military reasons.

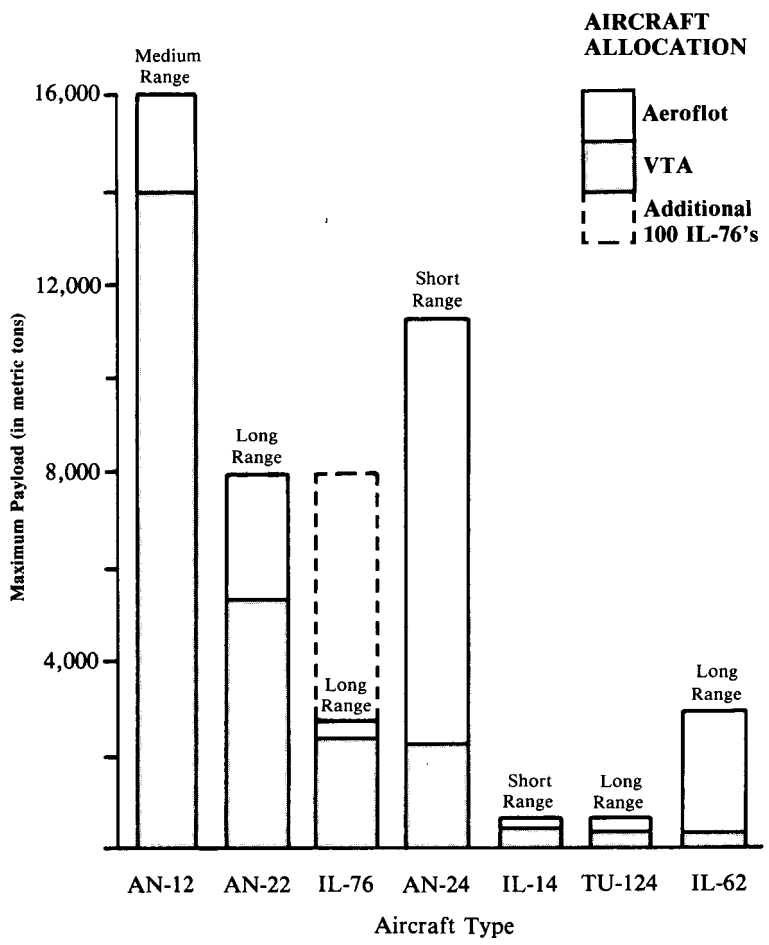
The greatest concern for US security interests is the use of Aeroflot to acquire strategically located footholds in the Indian Ocean, Persian Gulf, and Caribbean/Central American regions. The lesser developed locales, unprofitable to commercially competitive air service, are the most vulnerable targets for Aeroflot political exploitation.

The success-proven approach of the Soviet government is to offer a targeted Third World country the benefit of Aeroflot service—including provision of maintenance and service personnel, ground control approach equipment, and other inducements which the host country would be incapable of providing. This, of course, permits the Soviets to place key intelligence and political operatives working as Aeroflot personnel throughout numerous countries in the Third World besides providing the Soviets with the requisite navigational aides, flight path and approach controls, and ground facilities for future covert or overt military operations.

Table Six

Soviet Transport

One Time Lift Potential for Contiguous Power Projection (MATERIEL)



Options for Countering the Aeroflot Threat

Aeroflot and its counterpart Communist national airlines currently operate 11 weekly flights to the United States—nine to New York and two to Washington, DC. This does not include a scheduled Aeroflot flight to New York which labor action has precluded since the invasion of Afghanistan. These airlines and the number of weekly flights include: Aeroflot (Soviet)-1; Lot (Poland)-5; Tarom (Romania)-2; CSA (Czechoslovakia)-1; and CACC (People's Republic of China)-1. The CAAC flights to the United States will be increased to two weekly flights after May 2, 1981.

In addition to their scheduled flights, the Soviets and Bloc nations requested and received permission to operate hundreds of non-scheduled "special" flights, mainly carrying government-sponsored technical and trade groups, as shown in Table Nine. In 1979, 27% of the total sorties were non-scheduled "special flights." These were sharply reduced in 1980 to 17% of total flights), due mainly to the cutbacks forced on Soviet flights as a result of the Afghanistan invasion and reduction of Cubana's refugee flights following the refugee sealift operation.

Another important statistic is the number of authorized Cuban (Cubana Airlines) overflights permitted across US territory from Montreal to Havana. Cubana in particular has overflown restricted CONUS areas and offshore Atlantic fleet exercises. In addition, Cubana has regularly re-

quested overflight authorization from Havana to southern California via the southwestern portions of the United States. Cubana Airlines has also requested non-scheduled flights to Dallas, Chicago, and New Jersey airports in the greater New York region. To date, these requests have been denied due to the insistence of Defense Department officials who are highly concerned about the potential espionage advantage presented to the Soviet surrogate. Except for Cubana, the majority of other surrogate "special" non-scheduled flights are to New York, but a few have been authorized to the west coast with flight paths routed around restricted areas. Cubana's non-scheduled destinations include both Miami and New York, but with every effort made to minimize overland flight paths.

As noted earlier, Cubana in the past has managed to "inadvertently" stray beyond its authorized flight path up the east coast of the United States—most notably over the restricted Patuxent River Naval Air Station and the Myrtle Beach Air Force Base. Defense Department officials estimate that these overflights reached a level of four per month before Cubana was finally forced to fly over-water routes to New York and Montreal.

The initiative to reestablish Cubana air service into and over the United States was undertaken by former State Department Cuban Desk Officer Wayne Smith, who now represents US interests in Havana. According to Defense Department officials, Cubana's rights were granted without ever being channelled through—much less agreed to by—officials at DoD and other agencies, including Smith's compatriots at the Department of State.

Thus, although a strong effort has successfully been made to reduce the number of Communist air carrier flights over sensitive and restricted areas of the US, the 2,000-plus flights annually flown to US destinations do indeed provide these carriers ample opportunities for illegal activities on behalf of the Soviet Union.

While the various Communist carriers have generally been granted "special" and charter flight authorization to the United States, the Soviets deny US carriers the same rights. Furthermore, Pan American Airways was forced to abandon its Moscow flight because of unfavorable and non-reciprocal financial arrangements, and the Soviet government's refusal to let Pan American advertise and freely sell its tickets to Soviet citizens. Of course, Aeroflot advertises regularly in the American media and operates easily accessible ticket travel offices in Washington and New York.

Moreover, Pan American has been negotiating with the Soviet authorities for permission to fly from India to Europe over southwestern Russia and Afghanistan. This request has been made because of the closure of Iranian airspace to American carriers. To date, the Soviets have denied Pan American any overflight privileges.

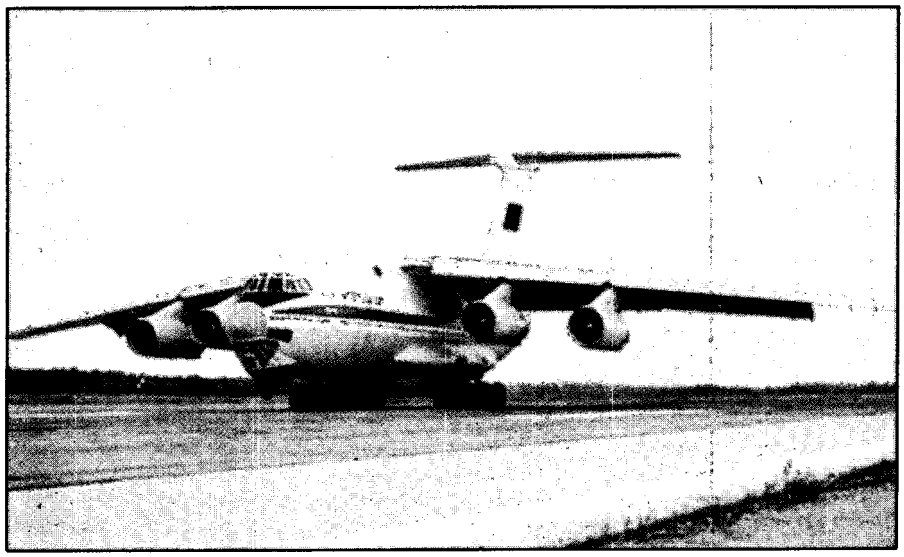
The US operates internationally and permits foreign carriers into this country through bilateral agreements governed by US laws and international conventions. None of these arrangements provide for, nor condone, the illicit practices of Aeroflot and some of its surrogate partners. The US government has several means of countering the threats as set forth without too great a risk of exacerbating already strained relations with the Soviet Union, and, notably, Cuba. Secondly, none of these proposed corrective actions are hostile acts toward the Soviet Union or affected surrogates; rather, these recommended actions would be applied against any carrier, domestic or foreign, which violates standard international practice and national laws.

Table Seven

Frequency of Critical Events and Commencement of Aeroflot Service

Critical Event Number	Prior to Areoflot Service	Concurrent with Aeroflot Service	Following Aeroflot Service	Totals
1 Prestige	–	–	–	24*
2 Political Instability	10	9	4	23**
3 Military Aid	4	10	20	34
4 Economic Aid	1	5	9	15
5 Bases Acquisition		2	6	8
6 Insurgency Support	2	7	12	21
Totals	17	33	51	101

* Critical event #1 not relevant to commencement of Aeroflot service, thus combined in total (not included in subtotals).
** Does not include Seven East European Communist states.



"Commercial" IL-76.

Table Eight

Aeroflot Augmentation VTA Airlift Capabilities According to Range Limitations

Aircraft (Range) (statute miles)	Total All Acft	VTA	Aeroflot	Aeroflot as Percentage of Total
Personnel Transport (in Thousands)				
Short-Range (<1,500)	149.5	94.1	55.4	37%
Medium-Range (<2,500)	136.0	91.5	44.5	33
Long-Range (<4,000)	70.0	37.5	32.5	46
Materiel Transport (in Thousands of Tons)				
Short-Range (<1,500)	43.0	26.0	17.0	40%
Medium-Range (<2,500)	30.75	23.0	7.75	25
Long-Range (<4,000)	14.75	9.0	5.75	39

In light of the above premeditated violations by Communist carriers and the necessity for strict law enforcement, it is indeed surprising that neither the FAA nor the State Department has seen fit to impose meaningful penalties on the violators. The record shows that the most the United States government could do was issue a warning or "slap on the wrist." It is difficult to understand the Government's self-defeating policy unless it was done in the spirit of "detente" or fear of retaliation against US carriers. Considering Afghanistan and the fact that no American carriers now service the Soviet Union, these explanations seem hardly tenable.

Authorities connected with DoD and the Air Force have suggested several courses of action designed to minimize the Soviet/surrogate espionage threat as well as keep the diplomatic "noise level" as low as possible. These options include:

- Denial of Dulles ingress because of overflights of sensitive facilities in Washington, Ft. Meade, and Northeast corridor areas. Boston's Logan Airport should be used instead to preclude land overflight. On the other hand, if the Soviets take a more lenient policy and grant favorable reciprocal terms to US carriers, Aeroflot could be permitted better access to the United States.
- Cubana's routes from Havana/Montreal into JFK, New York should be confined to only over-water routes beyond the US air defense zone.
- No "charter flights" should be permitted until *quid pro quo* charter authorization (now denied US carriers to the Soviet Union) is granted.
- If charter flights are granted under *quid pro quo* conditions, a minimum of 15 days notification should be mandatory.
- Perform rigorous and continual inspection of all communist Bloc aircraft in conformity with US Government regulations and agreements and international conventions with the foreign carriers. International agreements provide for frequent and thorough inspections, some on a "no notice" basis. The Soviets used to conduct such inspections zealously when Pan Am was operating into Russia; the US has not conducted *any* such inspections of Aeroflot planes operating in the US during recent years. ■☆■

Table Nine

Soviet and Bloc Commercial Flights* to the US

	Scheduled		Other Non-scheduled		Totals	
	1979	1980	1979	1980	1979	1980
Soviet Union (Aeroflot)	344	172	62	6	406	178
Poland (Lot)	562	488	126	150	688	638
Romania (Tarom)	192	288	8	4	200	292
Czecholslovakia (CSA)	536	544	0	4	526	548
East Germany (Interflug)	0	0	6	12	6	12
Bulgaria (Balkan)	0	0	8	0	8	0
Cuba (Cubana)	288**	284**	488	186	776	470
Totals	1,922	1,776	698	362	2,610	2,138

* Flight—a single transit, i.e., one-way trip.
** Authorized Overflights, Havana-Montreal.

Table Ten

Communist Bloc Civil Aviation Information

Communist Bloc State ICAO 2-LTR Designator & State Airline	Albania	Bulgaria LZ Balkan	Democratic Kamuchea (Cambodia)	China (PRC) CA CAAC	Cuba CU Cubana	Czech. OK CSA	E. Germ. (GDR) IF Interflug	Hungary MA Malev	N. Korea JS CAA of DPRK	Outer Mongolia	Poland LO Lot	Romania RO Tarom	USSR SU Aeroflot	Vietnam VN Air Vietnam
ICAO Member	No	8 Jul 67	Yes	15 Feb 74	10 Jun 49	4 Apr 47	No	30 Oct 69	15 Sep 77	No	4 Apr 47	30 May 65	14 Nov 70	12 Apr 80
IASTA Member	No	21 Sep 70	15 Feb 56	No	20 Jun 47	18 Apr 45	No	15 Jan 73	No	No	6 Apr 45	No	No	No
Diplomatic Relations with US	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
US CAB 402 Permit	No	No	No	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	No
Bi-Lateral Air Transport Agreement	No	No	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	No
FAA Approved AIPs	No	Yes	No	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No
Prior Permission Required for Entry		7 Working Days		10 Days	48 Hrs O/F 10 Days LNDG	*Yes	**Yes	2 Working Days			7 Days O/F 14 Days LNDG	3 Days 30 Days Series	5 Work Days (3 weeks suggested	
Diplomatic Clearance Required for Entry		Yes		Yes								Yes	Yes	
Entry Permit Valid		48 Hrs												
Changes must be submitted		24 Hrs												
Void if A/C does not enter		10 Hrs												
Escort Crew Required				Yes									Yes	
Flight Plan Required											48 Hrs	30 Mins.		
Flight Notification MSG Required												24 Hrs		

*Czechoslovakia Requires: 72 Hrs Advance Notice for Non-Commercial Flights with 6 or less people
24 Hrs Advance Notice for Non-Commercial Flights with more than 6 people
18 Working Days Notice for Non-Scheduled Commercial Flights

**E. Germany (GDR) Requires:
48 Hrs Advance Notice
15 Days Advance Notice for A/C remaining in GDR for extended period of time
72 Hrs Advance Notice for series of 3 or more Flights

Source: FAA/AIA

Presidential Courage—and the April 1980 Iranian Rescue Mission

by Benjamin F. Schemmer

AS WE REMEMBER AND HONOR this Memorial Day the eight men who gave their lives at Desert One last April 25th, the men from that rescue mission would tell you there is one casualty for whom there will never be a medal, although they believe he deserves it most—former President Jimmy Carter.

The men of Joint Task Force 1-79 speak of Jimmy Carter with a respect that borders on awe, a reverence almost, that one seldom hears from military men—because they *expect* courage of leaders who order hazardous missions, just as they believe those leaders should be able to *expect* courage of them.

There is an unwritten axiom of special military operations: the world hears about them only when they fail, never when they succeed. A basic premise of such work is that it be deniable; thus the guts of even the most successful missions aren't advertised. Secrecy strictures are so tight and enduring that the truth behind them rarely surfaces; when it does (if ever), it is invariably long after the mission. A regrettable but frequent by-product of that secrecy is that the people who risk such missions seldom obtain proper credit—publicly *or* professionally—even for acts of the most compelling courage.

Presidential courage takes many forms. The nation has just *seen* one kind—in the graceful, reassuring calm and infectuous humor with which Ronald Reagan reacted to his attempted assassination on March 30th after taking a bullet through the lung. But the nation has not even *heard* of Jimmy Carter's courage a year ago. With the mission's first anniversary here, the men he asked to rescue our former hostages want Jimmy Carter to be given credit for a form of courage which they say far transcended theirs.

At this time last year, the nation was clamoring for some kind of Presidential *action* to resolve the hostage crisis. Some civilians in government, despairing of ever recovering the hostages, had even proposed a B-52 raid to level the holy city of Qom. Their patience, like others', was exhausted, hopes having been dashed once too often from the on-again, off-again diplomatic channels through which the Administration hoped to recover the hostages.

Carter had ordered the Joint Chiefs of Staff to ready a rescue mission eight days after the hostages had been seized, and the first plan was ready on December 20th (albeit, its planners had cautioned, with elements of risk that concerned them greatly).

The mission, the President and its planners had emphasized, was to be a *rescue,* not a punitive or retaliatory raid. For five months before last April 16th, when Carter finally approved launching it, the President had made it clear that the nation would pursue *one* goal—"To protect our national honor and interests, and bring the hostages home *alive.*" Throughout the task force's planning, the "operative" word was "alive." And, Carter had emphasized quietly to the few people really privy to his thinking, he felt the Presidency bound to resolve the crisis along Constitutional lines—diplomacy first; military options would be used only if diplomacy failed.

Late last March, Carter's hopes were high that release of the hostages was imminent. Through a complex, prearranged scenario, Carter was to get a set of signals from Iran that were supposed to trigger a positive public statement from him; given it, Iranian officials had agreed, the hostages would then be transferred to government control, the first and crucial step leading to their freedom. As Jody Powell recounts those trying days, the signals from Iran came three days late—through a coincidence, shortly after midnight on April 1st, the 150th day of captivity— and the morning of the Wisconsin primary. At seven a.m., Carter made his positive statement, announcing at the White House that the crisis was abating and that the hostages would soon be home. But it soon became apparent, once again, that the Iranians were unable or unwilling to follow through.

Carter was later criticized brutally for his awkwardly timed statement: political pundits charged that he had politicized the hostage issue to win a primary.

But there is one powerful indication that the President had read the diplomatic signal in good faith: it was given enough credence within the Pentagon that a senior officer relied on it to disapprove the planned early deployment of some of the rescue team members to the Persian Gulf. Within days of that hopeful news, however, the crisis and apparent danger of losing the hostages reached new heights: Iranian spokesmen announced (previously they had only "warned") that some hostages would be tried as spies. Under Iranian justice, spies are shot: those convicted before noon are executed by sundown; those convicted after noon are executed by noon the next day. Carter's advisors were well aware that some 460 Iranians had already been executed after such quick "trials." All promising diplomatic avenues had run their course with no favorable outcome. Carter did not need to be reminded that it is proper for a President to use military force when diplomacy fails or stalls.

Yet Jimmy Carter was profoundly aware, when he approved the Iranian hostage rescue mission a year ago Thursday, April 16th, that the mission might not succeed. He had asked in a final White House review before the entire National Security Council that evening (according to a former White House official present at the three-hour meeting), "'What are the chances of success?"

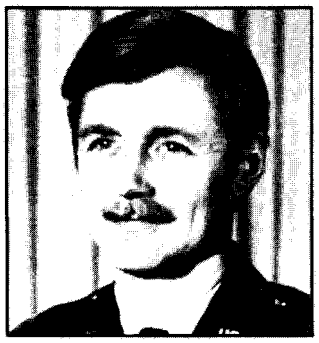
President Carter attending services for the eight men who died at Desert One.
***(Washington Post* photo.)**

Recollections of that meeting vary slightly, but six people who were present agree that the President was told something very close to this:

"The mission has high prospects for success. But if something goes wrong, the odds become somewhere between zero and 100 percent, and those two numbers could be *very* close together. We won't know how close, or how far apart, until we get *into* Iran. Any number of unforeseen factors, none of which we can precisely predict or control, could cause the whole thing to go to hell in a handbasket." Factors such as desert weather, Iranian forces turning up in the wrong place, a last minute move of the hostages, and equipment failures were cited. One of the four Carter was specifically warned about—equipment failure—would later cause the mission to fail; another factor he was warned about, weather, contributed to the abort at Desert One.

Based on the factors they *could* control, the briefer told the President, he and his men were confident they could free the hostages *and* bring them home alive. (Today, intelligence sources say, debriefings

"Also I heard the voice of the Lord, saying, Whom shall I send, and who will go for us? Then said I, Here am I; send me." *Isaiah 6:8*



Captain Richard L. Bakke
United States Air Force

Sergeant John D. Harvey
United States Marine Corps

Corporal George N. Holmes, Jr.
United States Marine Corps

Staff Sergeant Dewey L. Johnson
United States Marine Corps

of the former hostages confirm that the rescue force knew the precise location, down to their very rooms, of 95% of the 51 men and two women they tried to rescue—and would quickly have located the others based on information gleaned during the mission.) But the briefer was equally clear in telling the President that there could be casualties on both sides if something went awry, according to one White House official present in the Situation Room that evening. In that case, the President was told, "Perhaps one aircraft crew could be lost somewhere along the way; three to eight hostages killed or wounded; three to eight rescue team members killed or wounded; and an indeterminate number of Iranians, depending on how they elect to respond."

Thus, James Earl Carter knew last April that the mission he was ordering was not without substantial risk, that it might fail, and that there could be casualties, even among the hostages he had sworn to bring home alive.

It was not the kind of prognosis that made a Presidential decision to execute the mission easy. Jimmy Carter still had the courage to try.

Carter demonstrated that evening last April 16th another kind of Presidential courage—unique, perhaps unprecedented, in recent American military history. At one point in the briefing, national security advisor Zbigniew Brzezinski asked, "How can we talk to the commander if we need to?" Carter cut the question off abruptly: he told Brzezinski, "We *won't*!" He turned and said, "I know you'll be busy. Your mission comes first. If you *have* time to tell us what's happening, that would be nice. But don't feel you have to give us play by play status reports. I will not second guess or interfere." Carter also emphasized that he would follow the chain of command: the President to the Secretary of Defense to the Chairman, Joint Chiefs of Staff, to the Joint Task Force Commander. The Task Force Commander, he said, should not concern himself with *any* other counsel.

Other senior military officers who were present confirm that dialogue. And add, they have never *heard* of a President in recent times giving or following such clear guidance to a commander. Carter said, "I won't interfere"—and he didn't.

(That vignette is a striking contrast to the memories of other commanders on other recent but far less sensitive operations. [During the 1976 crisis in Lebanon, Defense Secretary Donald Rumsfeld not only monitored operations closely from the Pentagon's National Military Command Center, but—his aides bragged later to the Pentagon press corps—Rumsfeld himself was in "direct radio-telephone communication" with the boatswain's mate driving one of the landing craft standing by offshore to evacuate American personnel from Beirut.] Carter's vow not to "interfere" was also a striking contrast to his image as a President obsessed with detail—wont, it was said, to micromanage national security issues in particular.)

The men of JTF 1-79 understood the risks too. They knew what the President had been told of their odds.

The night before they flew into Desert One, in a few moments set aside for quiet meditation, one of the men was asked to serve as chaplain. He ended the brief "service" by leading his comrades in singing "The Battle Hymn of the Republic."

Some of the men found a few moments to lie on their backs on the desert floor and rest as they talked about the mission. As he looked up at the stars over Southwest Asia—just a few hours before he was killed—a young aircrew member turned to one of his comrades and said quietly, "I don't mind sacrificing for the things I believe in."

Had the mission gone forward from Desert One, the rescue team would have received a message from their commander at their loge head the next night: the quote from *Isaiah*, "Whom shall I send, and who will go for us? . . . Here am I; send me."

(In mid-February, Major General James B. Vaught, the Commander of JTF 1-79, was invited to Hermitage, PA with some of the former hostages to unveil a monument dedicated to the eight men who died the day after that brief worship service at their Mideast staging field. The townspeople of Hermitage did not know of that service: but at the very moment Vaught unveiled the monument, a 200-person choir began singing "The Battle Hymn of the Republic.")

Three days after the tragic events of Desert One, President Carter flew to a secret location to meet with most members of the rescue force immediately upon their return to the US. Carter says today that for him, it was the most emotional moment of the whole rescue operation. As Carter stepped off the helicopter, Colonel Charles Beckwith—a "big, burly sort of guy" who grew up in Ellaville, Georgia, 15 miles north of Plains, and who commanded the rescue team that would have gone on from Desert One to Tehran—saluted the President. At first there was silence; then Carter embraced him. Beckwith apologized for "failing." Carter said he could not accept the apology.

Beckwith led him inside a building where his men were waiting. They were still in combat fatigues; bruises and minor burns were evident on some, and others still wore hasty first aid bandages and dressings over their injuries. Carter told the men Beckwith had tried to apologize, and that he had refused to accept it. He told the men he considered them heroes; they were all part of the same team, Carter said, and their efforts had shown the world that America believes in freedom and will fight for it.

One of the men recalls that Carter then asked them, "What can I do for *you*?" A young Army or Marine Corps noncommissioned officer spoke up: "Mr. President, give us another chance. Don't write us off because we didn't hit a home run for you the first time." Carter was deeply moved by that charge from men whose comrades had died trying to carry out his orders. Later, Carter was equally moved when several Iranians in this coun-

"Also I heard the voice of the Lord, saying, Whom shall I send, and who will go for us? Then said I, Here am I; send me." *Isaiah 6:8*

Captain Harold L. Lewis, Jr.
United States Air Force

Technical Sergeant Joel C. Mayo
United States Air Force

Captain Lyn D. McIntosh
United States Air Force

Captain Charles T. McMillan, II
United States Air Force

try asked him to let *them* go on the next mission to rescue the hostages: they were ashamed of their countrymen holding Americans like common criminals, they told the President, and they wanted to prove that his agony, and the hostages', was not what Islam and Iran stood for.

Jimmy Carter's courage last April took other forms. Surely the hardest decision for any commander to make, be he a military man or a President, is to abort a mission once launched. (It is more than the issue of built-in momentum or wishful thinking and "can-do" daring: extricating a force once committed is always a hazardous operation, and fraught with far more risk than usual in a clandestine operation.) When Beckwith had to recommend aborting the operation because his men at Desert One were one helicopter too short of the number preagreed upon for the operation's next phase, Vaught relayed that recommendation—and endorsed it—to the Chairman, Joint Chiefs of Staff. He was asked, "How long do you have before you need a final decision?" Vaught told General David C. Jones, "No more than 10 to 15 minutes." Jones asked Vaught to stand by while he checked with Defense Secretary Harold Brown and the President: eight minutes later, Jones confirmed the President's endorsement of Vaught's gut-wrenching decision. (Carter went on TV early last April 25th and said, "It was my decision to cancel . . .") But as another member of Vaught's rescue team observed, "If you think it was a 'gut-wrenching' decision for Vaught, think what it must have been for Jimmy Carter 9,000 miles away!

"Sure, we could have improvised. Yes, we had the courage to go on and try. But we might have gone on and left a wreckage of heroic, but unproductive valor all the way from Desert One to Tehran.

"We were there to recover the hostages *alive*, not litter the desert with brave dead. Vaught didn't second guess us; Jones didn't second guess us; the President didn't second guess us. Jesus Christ, man, do you have *any* idea what kind of guts *that* takes?"

Finally, the men who "failed" Jimmy Carter last April ask that America remember: "*We* failed; *he* took the heat. He took full responsibility. *That's* courage. It may have cost him his Presidency."

(Actually, the *men* didn't fail; their *equipment* did. As Vaught understated it at the February 14th ceremony in Hermitage: "One of the things we learned, or reaffirmed, was that machines like helicopters don't have souls; they aren't very patriotic; and they really don't care if they're going to Tehran or Timbuktu when they decide to quit on you.")

(When I watched General Vaught unveil the monument to his eight men two months ago, he summarized their sacrifice in a way I wish their families and President Carter could hear this Memorial Day: "The mission was not a 'foolish undertaking' or a 'fiasco,' as some have said. It was a very best effort by a small group of courageous and brave Americans. Never did a small group of Americans try harder to do what they thought was right than those who went forth into that desert last April. There is no failure in failing: there is only failure in failing to try—and those who gave their lives knew that, even as they died—and I thank God for them.")

But 53 live Americans did come home safely. Did last April's rescue attempt help? The overwhelming majority of the former hostages with whom I've talked since their return believe it did help, and that it would have been successful. It prodded diplomats to try again; it gave diplomacy another chance. And, as one person told me, "At that time, we were able to confront our captors on a one-to-one basis—and win. A trained US force coming over the wall (or however) would have met pathetic resistance from that disorganized, confused, ragtag band of second string revolutionaries.

"They were brave when they had half a million Iranians with raised fists shouting behind them, but they would not martyr themselves to silence. Carter ended up being a martyr in silence: he didn't have half a million fists behind him in the Situation Room.

"And that's the difference." ■☆■

Author's Note: Throughout Jimmy Carter's Presidency, I doubt there has been any more vocal critic of his national security policies (or former Defense Secretary Harold Brown's execution of them) than me personally or than *Armed Forces Journal* editorially, even though neither has any particular political persuasion. Had I known last November all of what I know today about Jimmy Carter's courage last April, I still would have voted against him last November 4th. But this nation produces good Presidents, and his special courage last April ranks Jimmy Carter among the bravest. ■☆■

THIS COMMENTARY ALSO APPEARED in the Washington Star's *editorial section, "Comment," on Easter Sunday, April 19th.*

Editors' Note: The men who tried to rescue our former hostages last April have established a college scholarship fund for the 17 children of the men killed or incapacitated at Desert One. The scholarship fund is named in honor of the late Colonel Arthur D. "Bull" Simons, who risked his life repeatedly trying to rescue fellow Americans from incarceration during World War II, Vietnam, and from Iran. Every American wanted to go to Iran last year to free our hostages; not all of us could go. But all of us *can* thank the men who *did* go by contributing, whatever our means, to the Bull Simons Scholarship Fund for their children. Send your tax exempt contribution to:

Colonel Arthur D. Simons
Scholarship Fund
P.O. Box "Eight"
Dallas, TX 75221. ■☆■

The Colonel Arthur D. Simons Scholarship Fund

The Iranian rescue team members are establishing a college scholarship fund for the 17 children of their comrades who were killed or incapacitated attempting to free 53 fellow Americans April 24 and 25.

This scholarship fund is named in memory of the late Army Colonel Arthur D. Simons, a legendary soldier who risked his life repeatedly to rescue his fellow Americans. Many of the American servicemen who planned, and some of those who attempted the mission to rescue 53 American embassy hostages from Iran, served with Colonel Simons during his career.

This scholarship fund has no overhead. Every penny you contribute will apply directly to the scholarships.

Tax-exempt status has been approved under Section 501(c)(3) of the Internal Revenue Code. However, the issue is not a tax deduction. Rather, it is to ensure that these youngsters will have an opportunity to go to college without further burden on their families.

Col. Arthur D. Simons Scholarship Fund
Box "8"
Dallas, TX 75221

Enclosed is my contribution for scholarships for the children of the American Servicemen who gave their lives in April, 1980, trying to rescue their fellow Americans from Iran.

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Eluding the world's largest navy, von Luckner prowled 30,000 miles–and terrorized Allied sea lanes.

He concocted an elaborate Norwegian disguise for his armed windjammer and crew. And bluffed his way through the British blockade. Then from January to July 1917, German Count Felix von Luckner hunted prey from North Atlantic to South Pacific, sinking 14 Allied and neutral merchant ships while dodging British warships.

His disarming technique: sidle up to the target on some innocent pretext...then suddenly haul down the Norwegian flag, hoist German colors, reveal weapons, seize the vessel, take aboard all personnel, and sink her. No one was ever hurt or killed. His multinational "prisoners" ate well and thoroughly enjoyed themselves. Still, the raids had a disruptive effect on Allied war logistics that extended beyond the sinkings themselves. Fear of the "Sea Devil" upset sailing schedules and delayed some badly needed war cargoes.

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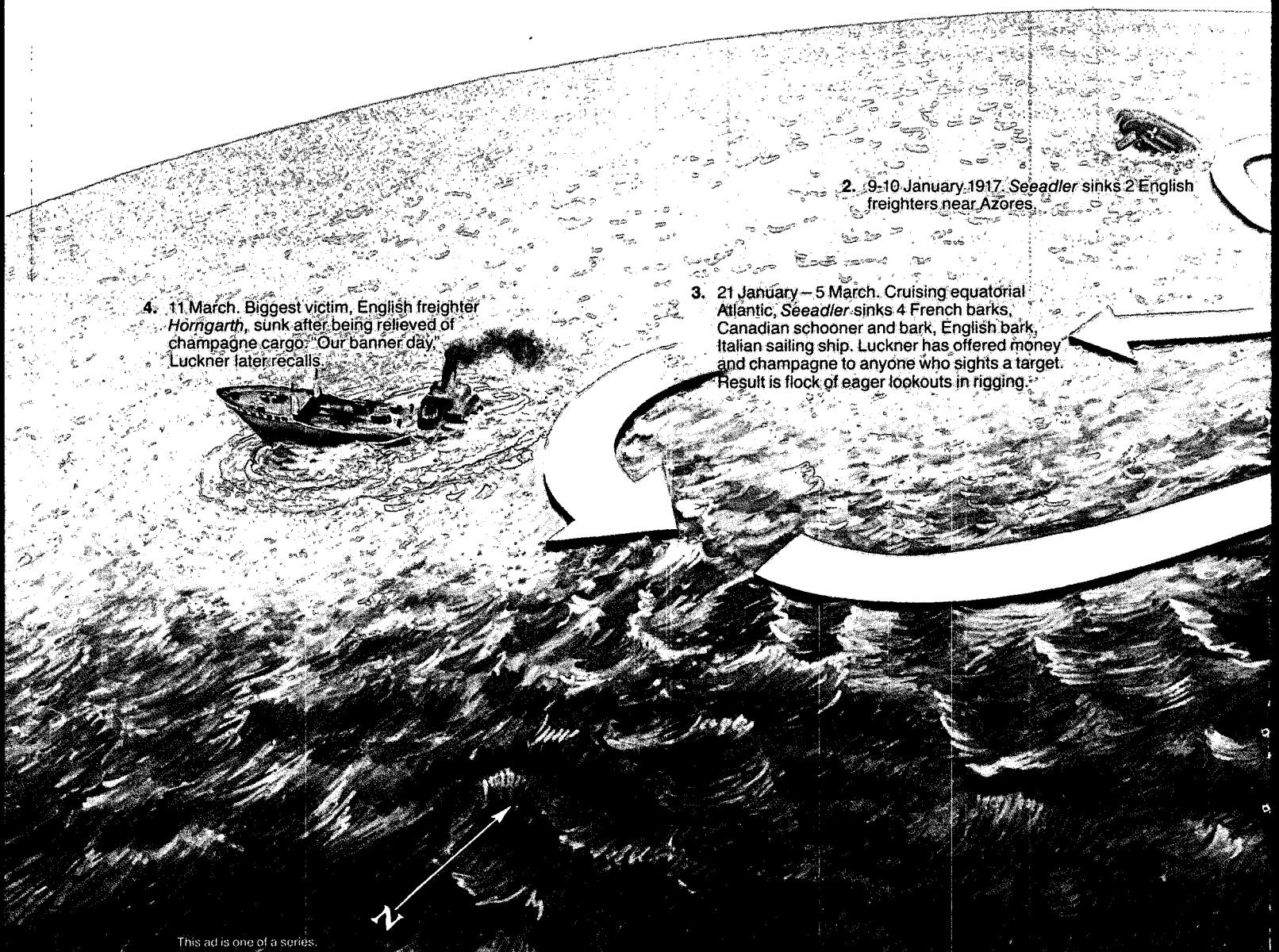

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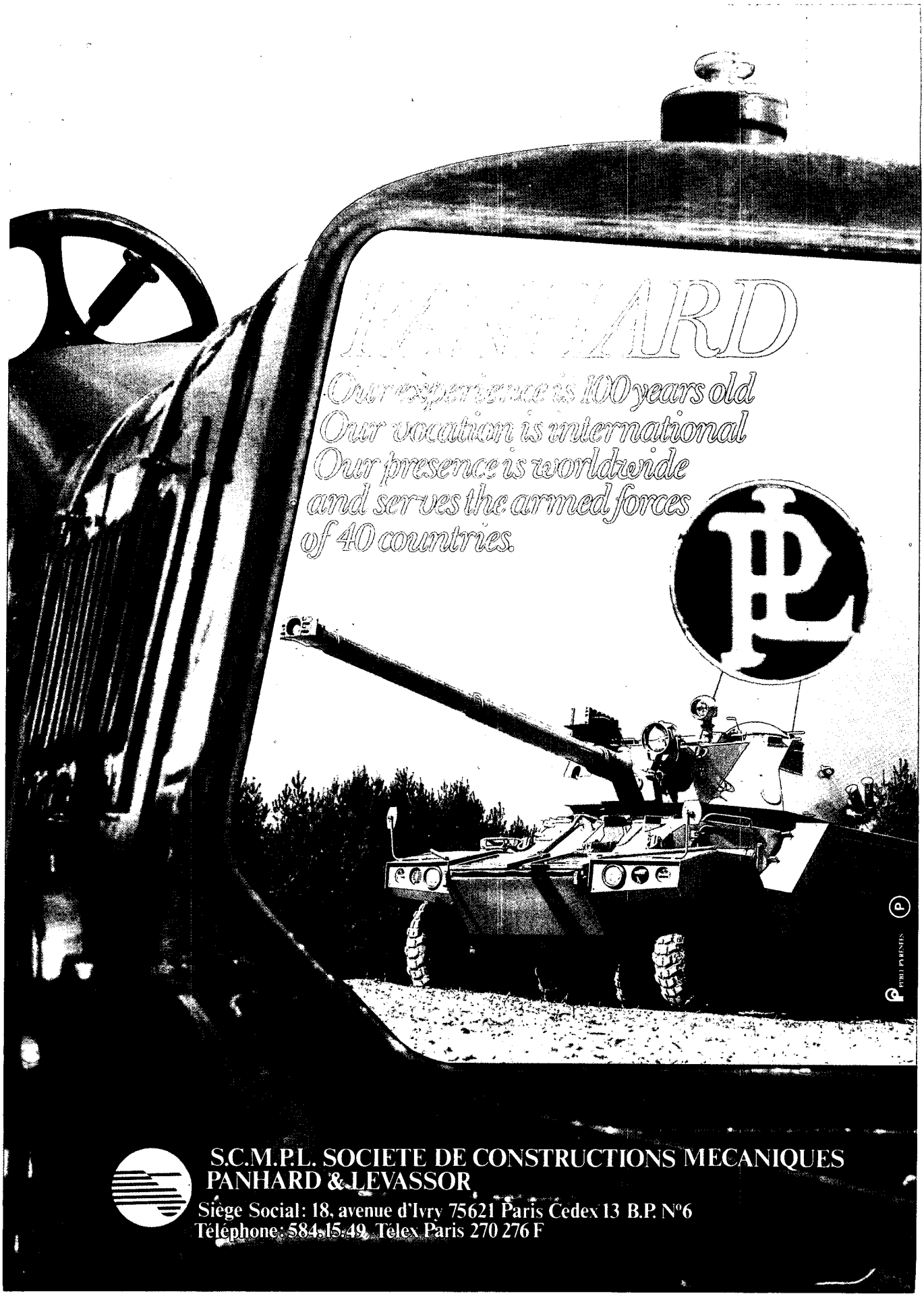
1. 25 December 1916. En route from Hamburg under orders to disrupt Allied supply lines, Count von Luckner's 3-masted, motorized *Seeadler* is boarded and searched by British cruiser crew on blockade duty. British grant clearance, fooled by Norwegian disguise that includes captain's "wife": a sailor in wig and woman's clothes.

5. 21 March. Some 450 prisoners are put aboard captured French bark bound for Rio. *Seeadler* then flees alerted British navy around Cape Horn, sinks 3 American schooners in South Pacific, is wrecked on island by tidal wave while crew is ashore. In small boat, Luckner island-hops for 2,300 miles, is captured and interned. He escapes and is interned again until war's end, when he is feted as hero by both sides.



People

Memorial Day, 1981

THIS POEM was written by then PFC Sam Hall on Armistice Day, 1944, while in class being trained for intelligence duty. At 10:45 a.m., the students were commanded to stop work and sit at attention while the bugle sounds heard during a soldier's day were played over the public address system. Ending in taps, the moment spurred Hall to write this poem for the dead soldiers who could no longer hear them. ■☆■

General of the Army Omar N. Bradley The Soldier's Soldier In whose memory, like that of the eight men who died last April at Desert One and all of the soldiers, airmen, sailors, Marines and Coast Guardsmen he served so well as Veterans Administrator after World War II, we commemorate this issue. ■☆■

Dead Heroes

by Sam Hall

Dead Heroes hear one bugle call;
Not Lights Out, Call to Quarters,
Taps; Sound no Retreat for them,
'Twill fall unheard. The lowered
Flag that flaps protesting 'gainst
The pole finds no salute in answer
To the sound of To the Colors,
And the glow of setting sun upon
Their mound but glorifies their
Silent sleep. They'll hear no
Bugled call but one yet for that
One they all must keep aware;
Before the last note's done, some
New and haloed sun will see their
Souls leap up at Reveille. ■☆■

Darts & Laurels

To the Commander, Caribbean Contingency Joint Task Force—whose first 1981 press release we've just read, wrapping up the new command's first year of operations—for not recommending that his 70-man headquarters be disestablished. We need its people elsewhere: the command is redundant, a political waste announced to defuse President Jimmy Carter's embarrassment over the self-imposed 1979 fiasco over the Soviet combat brigade in Cuba. Having read all of what CCJTF accomplished in 1980, we feel all the more strongly about what we said in our March issue: the Pentagon needs more forces, not more headquarters.

To the *Journal* reader who keeps bugging us to ask Harold Brown the following questions:

- 'Mr. Secretary, where did it all go wrong?"
- "Sir, having spent almost a trillion dollars in the past four years, how did we end up second best?"
- "Secretary Brown, are we stronger now, in a relative sense, or are we weaker than we were four years ago?"
- "What, Sir, would you recommend to your successors to compensate for your stewardship?"
- "Harold, had you had a freer hand, what *would* you really have done?"

To the *Journal* subscriber who recently joined the White House Presidential scheduling staff under Michael Deaver—for candor. When we asked how she liked her job, she told us, "If you have to go back to work, it's a great place to start."

To retired Navy Admiral and former CIA Director Stansfield Turner—for (inadvertently) admitting why he is no longer Director of Central Intelligence. In a *New York Times Magazine* article of March 29th, "Why We Shouldn't Build the M-X," Turner wrote, "To construct a base for it will require, according to some estimates, 40% of the country's total cement production for three years." He must have gotten the numbers from the same sources he got his optimistic mid-1978 intelligence on Iran, and checked them about as carelessly: He's only off by a factor of *forty*. USAF tells us that the *total* M-X cement need will be about 1½-million tons over an eight-year period, or about ½ of one percent of US production. Admiral Turner is said to be lecturing, consulting, and writing a book about military strategy. That's hilarious! ■☆■

Star Status

AIR FORCE

	From	To
BABCOCK, Leon W., Jr. Brigadier General	Comdr, 601 Tac Control Wg, USAF in Eur, APO NY	Asst CofS, Oper, Allied Forces Central Eur, APO NY
BISHOP, Charles E. Brigadier General	Comdr, 23rd Air Div, N American Air Def Reg, Duluth Intn'l Airport, MN	VComdr, 9th AF, TAC Air Comd, Shaw AFB, SC
DREYER, Christian F., Jr. Brigadier General	Comdt, Sq Officer Schl, Air Trning Comd, Maxwell AFB, AL	Comdr, 601 Tac Control Wg, USAF in Eur, APO NY
DYER, Pintard M., III Brigadier General	CofS, 15th AF, SAC, March AFB, CA	Comdr, 12 Air Div, SAC, Dyess AFB, TX
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ARMY

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ODOM, William E. Brigadier General	Natl Sec Council Stf, White House, Wash, DC	Asst Dep CofS Intel, Dep of Army, Wash, DC
POINTER, Robert W., Jr. Colonel (P)	Proj Mgr, Cannon Art Weapons Sys, Picatinny Arsenal, NJ	Asst CofS, G4, 8th USA/ Asst CofS, J-4, UN Comd/ US Forces Korea/Asst CofS, C-4, Comb Forces Comd Korea, APO San Francisco

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Army *(continued)*

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JOHNSTON, Fred W. Rear Admiral	Special Asst to Dir, Plans & Policy, J-5, JCS	Comdr, Sea Based ASW Wings, Atlantic
LONG, L. J. Admiral	Comdr in Chf, Pac US Navy	Extension of tenure
MARRYOTT, Ronald F. Rear Admiral	Comding Ofcr, Naval Air Station, Moffett Field	Comdr, Iceland Def Force
METCALF, Joseph, III Rear Admiral	Comdr, Cruiser Dest GP EIGHT	Dir, Plning & Prog Div
MOONEY, John B. Rear Admiral	Dir, Total Force Plning Div, OP-11	Dir, Oceanography Div, OP-952/Oceanographer of Navy
WILLIAMS, James D. Rear Admiral	Comdr, Sub Div SIXTEEN	Comdr, Naval Base Seattle

■☆■

MEMOS

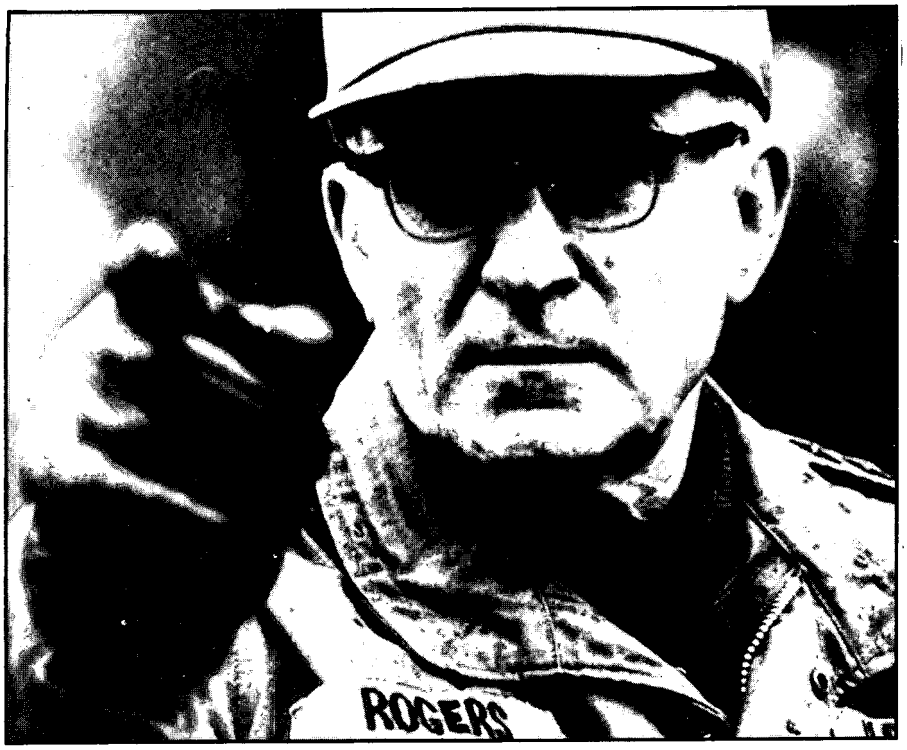
FIRST DELIVERY of the Tactical Digital Facsimile (TDF) units has been made to the Naval Electronic Systems Command by Datalog Division of Litton Industries. This communications system is capable of transmitting and receiving words and pictures over commercial and tactical communications circuits, with simultaneous transmission and reception possible. Full-scale production of more than 1,000 units is scheduled to begin early next year.

THE GUIDED MISSILE FRIGATE, *Clifton Sprague,* was delivered to the US Navy by Maine's Bath Iron Works 16 weeks ahead of its construction schedule. The *Clifton Sprague* becomes the sixth of the FFG-7-class guided missile frigates built by BIW to be delivered ahead of schedule, a total of 68 weeks early for the six ships.

ASSAULT BREAKER'S flight test demonstration program will get a boost from a $10-million contract awarded by the US Army to Vought Corporation. Vought had been awarded $8.7-million for work on the program in 1979. Under the new contract, Vought will launch six T-22 missiles, which are the same size as the Lance missile, also built by Vought. The Assault Breaker mission is one of the roles being considered for the Army's Corps Support Weapon System. Vought is proposing either its Lance II or T-22 missile as a candidate for CSWS. ■☆■

Classifieds

Consolidated Mess



"UNCLE SAM WANTS YOU?" General Bernard W. Rogers, Supreme Allied Commander, Europe (SACEUR). (DoD photo.) ■☆■

ITALIAN RAPID DEPLOYMENT FORCE—Two members of the Alpini (Alpine Soldier) demonstrate the Italian method of moving a 105mm pack howitzer over some of the most rugged country in the world. The Alpini Soldiers are among Italy's elite. (DoD photo.) ■☆■

An Original Recruiting Proposal

Editor's Note: *A Pentagon wag slipped us a copy of the following TWX some weeks ago, warning us, "You're not going to* believe *this one!" The message was properly formatted with all the right originator and address designators and date/time group entries, and it took us a few paragraphs to realize we'd been had.*

Fm: CNO, Washington, DC
To: NAVOP

Info: Prenatal Detachment, Bethesda, MD

Unclassified
Recruiting Program, Immediate Change

1. Due to the enormous expense of maintaining an efficient recruiting system and the additional expense and inconvenience of discharging unmarried women who are unable to complete their enlistments due to unauthorized pregnancy, the following revision of policy will be placed into effect immediately:

A. Upon certification by medical authorities that a female member of the Navy has reached the state of motherhood, she will be transferred to the Prenatal Detachment, Bethesda, MD, for duty. Such duty to be in a TDY status and to be terminated upon the birth of child or children.

B. The child will be registered with the last name of the suspected or likely father and a serial number will be assigned. In the case of extreme doubt as to the father, the name of the senior enlisted man at the last duty station of the mother at the time of conception will be assigned.

C. The child will be maintained in the Navy nursery, Bethesda, MD, until the age of eight (8) at which time he/she will be transferred to the Navy Orphans Farm to be maintained until the age of eighteen (18). On reaching this age, he/she will be enlisted in the Navy, and the Navy classification code of one of the parents will be assigned. In a case where the child (or children) is fathered by a civilian, he/she will probably be of low IQ; therefore, he/she will be assigned NEC 0124 (PO) and he/she will be transferred to a Marine Corps reserve unit as a replacement for a commander in a field company.

D. At the time of the child's enlistment, the parent of the same sex will be notified, and if having completed twenty (20) years of service will be permitted to retire from the Service.

2. Under this system, it is expected that the Navy will reproduce itself at a sufficient rate to allow closing down of the recruiting program entirely. It may be necessary to curtail this program in the future, as estimated turnover of personnel will probably exceed all expectations. ■☆■

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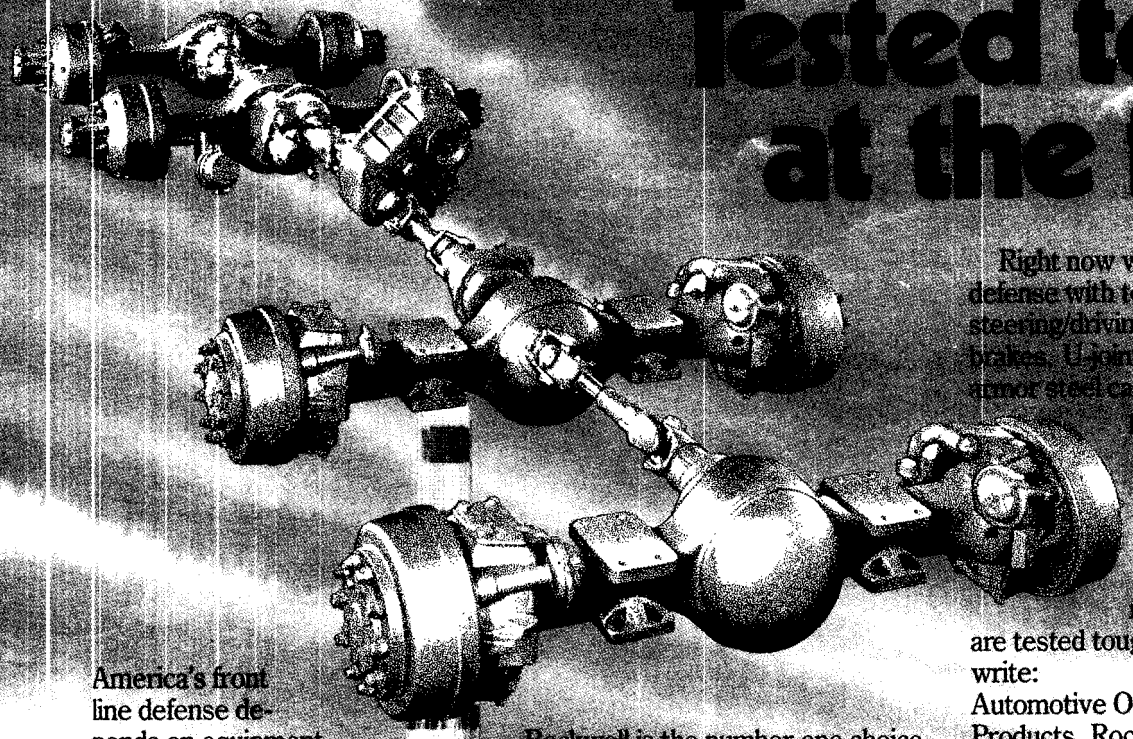

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